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ABSTRACT

Prepared as part of a needs assessment for the Watsonville Center of California's Cabrillo College, the three reports included in this document present findings from studies conducted of area high school students and CC students. The first report presents findings from a fall 1995 study of 1,234 students at California's Aptos High School and Watsonville High School regarding their educational goals and factors affecting their decision to enroll at CC. This report indicates that 42% cited CC as their first choice for college and that there was more interest in attending CC's main campus than the Center. The second report presents findings from a study of 407 CC students enrolled at the Watsonville Center in fall 1995 to determine their reasons for attending the Center, satisfaction with services, and interests in courses. Findings from this report indicate 69% of the students spoke Spanish as their first language and 22% said that they would not attend college at all if the Center did not exist. The final report presents findings from a longitudinal study of CC students who first enrolled in fall 1992, comparing outcomes through spring 1995 for students enrolled exclusively at the Watsonville Center, at both the Center and CC's main campus, and exclusively at the main campus. This report indicates that a majority of the students enrolled at the Center only were Hispanic and Center-only students were at a higher risk of dropping out. Survey instruments are included for the first two reports. Enrollment projections for 1995 to 2005 are appended. (HAA)

ED 405 937

# Watsonville Center Needs Analysis:

## Analysis of the High School Student Surveys

## Analysis of the Watsonville Center Student Surveys and

## Report of the Initial Longitudinal Student Cohort Tracking for the Needs Analysis of the Watsonville Center, Fall 1995.

Office of Institutional Research

Cabrillo College

Submitted to
The Watsonville Center Needs Analysis Task Force

January 1996

JC 970 259

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Office of Educational Research and Improvement
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# ANALYSIS OF THE HIGH SCHOOL STUDENT SURVEYS Fall, 1995

-a partial analysis for the
Watsonville Center Needs Analysis

Submitted to

The Watsonville Center Needs Analysis Task Force

Office of Institutional Research
January, 1996

## MAJOR HIGHLIGHTS IN THIS REPORT

**Junior and Senior High School Students Needs Assessment**
**Watsonville and Aptos High Schools**
**1,235 Respondents**

51% Juniors and 45% Seniors
75% Hispanics at Watsonville High
35% Hispanics at Aptos High
81% Declared a GPA between 2.0-4.0
63% Have a B. A. as an educational goal
62% Indicated that they will attend college immediately after high school
59% Intend to be full-time students
- 67% Aptos
- 53% Watsonville

42% Intend to go to Cabrillo
59% Intend to come to main campus
21% Will attend both locations
14% Will attend Watsonville Area

- 34% Watsonville High will attend both locations
- 28% Watsonville High will attend the Watsonville Center

63% Chose the WC because it's close to home
62% Would like to take classes weekday mornings

Top three most influential factors to attend Cabrillo:
- Schedule of classes that will allow them to work
- Bilingual Services(WH rate it higher)
- Close to home

Courses that students will be most likely to select:
- Math, Business, Learning Skills, Computer Applications, English, and Psychology.

*The above summary is courtesy of Felix Robles*

# ANALYSIS OF THE HIGH SCHOOL SURVEYS --Fall, 1995

## -a partial analysis for the Watsonville Center Needs Analysis

Office of Institutional Research, Janurary, 1996

This report is prepared for the Watsonville Center Needs Analysis Task Force. The Office of Institutional Research is in debt to a number of faculty and staff for providing support for the initial survey instrument design and survey administration. Thanks go to Pilot Robles, Task Force Chair, for his excellent leadership and hard work in facilitating the survey study. If you have further questions, please contact Jing at the Office of Institutional Research, Cabrillo College, 408/479-5719.

### Introduction

The High School Student Surveys were distributed to Aptos High School, Renaissance High School and Watsonville High School. A total of 1,234 surveys were returned from Aptos High School and Watsonville High School. Among them, Aptos High School returned 543 surveys and Watsonville High School 691. The return rate is: 90%. There were only 30 surveys sent to Renaissance High School, which constitutes only 2% of the total surveys. In order to retain a high dichotomous nature in data analysis, Renaissance High School was not included in the following analyses.

### Findings

*Since a majority of the responses from both high schools mirror one another, unless otherwise noted, the following analyses have used the aggregated data from both high schools.*

Demographics: Fifty-two percent of the survey participants are females. Fifty-one percent of the surveys came from 11th graders and 45% from 12th graders. Ethnicity distribution between these two school is as follows: at Aptos High there are 49% Whites, 35% Hispanics, 6% Asians, 4% American Indians, and 2% African Americans; at Watsonville High there are 75% Hispanics, 16% Whites, 4% Asians, 2% American Indians and 2% African Americans.

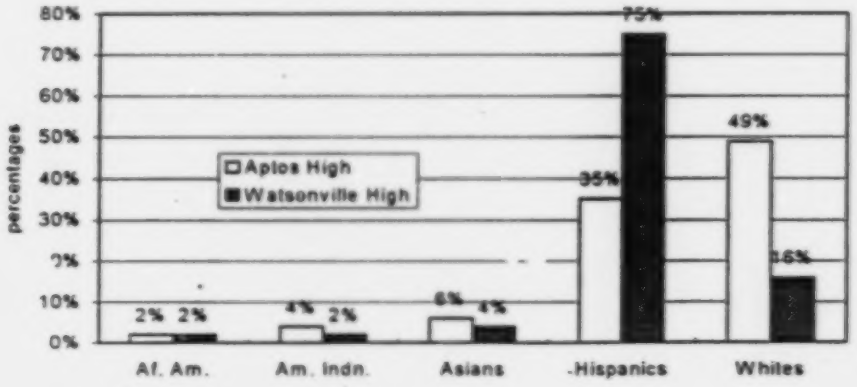


Figure 1. Ethnic distribution between high schools.

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GPA and Language Readiness: Eighty-one percent of the students reported their GPA to be between 2.0 - 4.0. At Aptos High, the majority of students (61%) speak English as their first language, while the figure is only 33% at Watsonville High. At Aptos High, 15% speak both English and another language equally well, yet at Watsonville High, 32% speak both languages equally well. Only 13% of the students at Aptos High speak English less fluently than their first language, more students (22%) from Watsonville High speak English less fluently than their first language, in this case, most likely Spanish.

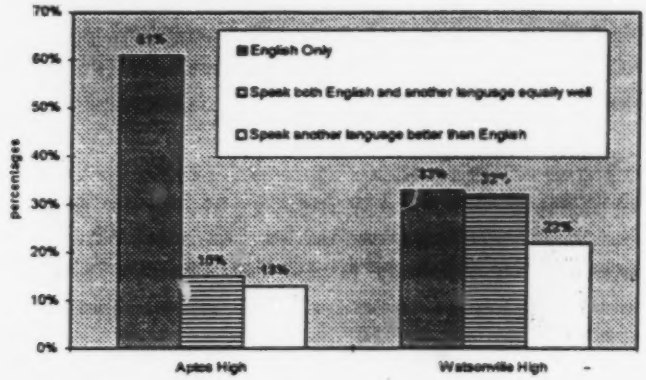


Figure 2. Students' language skills at both high schools.

Primary Source of Information: The majority of the students (63%) reported that they first heard about the main campus in Aptos and/or the Watsonville Center through their friends and family. Only 4% named newspaper, radio or buses. Ten percent named materials mailed by the college and 16% named their high school teachers as their primary source.

Educational Goal: The majority of the respondents (63%) reported their highest educational goal is to obtain a four-year college degree or higher, while 13% are happy to receive an A.A./A.S. degree and 12% high school diplomas. Eight percent of the students consider improving their English, math and reading skills as their highest educational goal and 4% consider obtaining a vocational certificate their goal.

When to Attend College: The majority of those surveyed (62%) said they will attend college immediately after high school and 17% will wait a year or two. Nineteen percent were unsure.

Financing for College: Fifty-six percent will use a combination of all three sources of income to finance their college education, e.g., parental support, working, and financial aid. For the rest of the respondents, 22% will mainly use college financial aid as their main source of college support, 11% are willing to work, and 9% will depend solely on aid from their parents.

College Course Load: In general, most of the respondents (59%) are going to be full-time students; a vast majority of the students from Aptos High (67%) will become full-time students, only 53% from Watsonville High are willing to go to college full-time.

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General Subject Area to Study: Forty-four percent of the respondents are undecided about this topic. Twenty-eight percent reported they would consider business, vocational, and occupational programs, 13% humanities/art/literature, 10% natural sciences, and 5% social sciences.

Cabrillo College as Their First Choice, and, if not, Where They Will Go: Forty-two percent said they will choose Cabrillo as their first choice for college, 26% said "maybe", and 30% indicated that they will not consider Cabrillo as their first choice. Of the students who may not be coming to Cabrillo (n=510), most of them (59%) will be going directly to a four-year college, 18% will be going to another community college, 15% considered Cabrillo too far from home, and only 8% had no plans for college at all.

Going to the Main Campus or the Watsonville Center/Area: Responses to this question differ between Aptos High and Watsonville High. The majority (59%) of Aptos High School students will be coming to the main campus, 21% will be going to both locations, and 14% will be going to the Watsonville Center/Area. Students from Watsonville High reported that only 36% will be coming to the main campus, 34% will be going to both locations, and 28% will be at the Watsonville Center/Area.

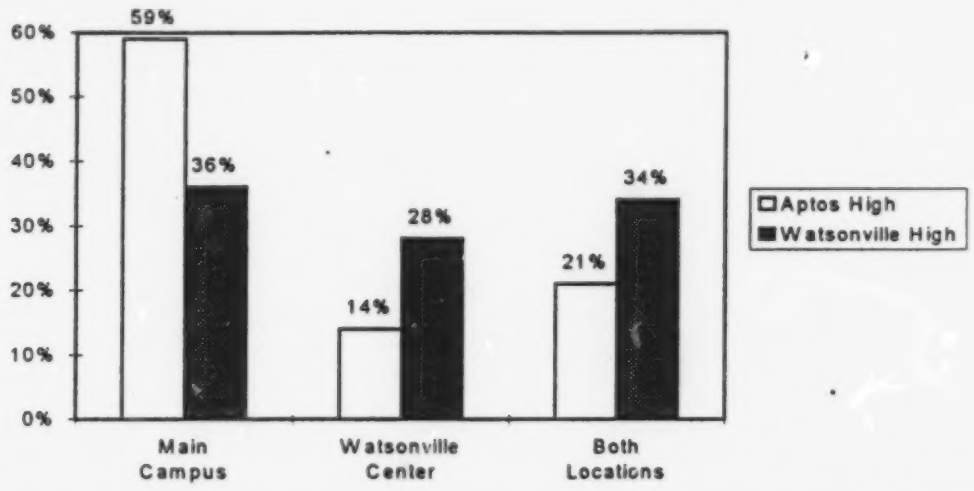


Figure 3. Which location of Cabrillo College will the high school students be going to?

Why the Main Campus? Of those who said they will be going to the main campus (n=531), 38% cited the reason, "it is more like a college", 15% believed that the Watsonville Center/Area does not offer the courses they need, and 15% felt that the Watsonville Center/Area is too close to home.

Why the Watsonville Center/Area only? Of those who reported to be going to the Watsonville Center/Area only (n=491), the majority (63%) chose the reason that it was too close to home, 13% felt that it would be more comfortable going there, 12% believe

that it offers the courses they need, and 11% liked the bilingual staff and services offered there.

Bilingual College Courses Needed? Forty-one percent did not feel the need to offer college courses bilingually, 27% said yes, and 30% did not care.

Time to Take Classes: The majority (62%) would like to take classes weekday mornings, 26% on weekday afternoons, 9% on weekday evenings, and very few want to take classes on weekends.

Influential Factors in Deciding Attending Cabrillo College: The top 6 most important factors are:

1) Schedule of classes that will allow them to work while attending college
2) Classes that meet their interests
3) Scholarships, grants, loans or jobs on campus
4) Low-cost fees
5) Classes transferable to a four-year college (Watsonville High students rated this somewhat lower)
6) Vocational programs/job training (Watsonville High School students rated this somewhat higher)

The 6 factors that are of some importance:

1) Bilingual services (Watsonville High School students rated this somewhat higher)
2) Tutorial services
3) Library services
4) Safety and security on campus
5) Career guidance and job placement services
6) Academic counseling

The factors that are of little importance in their decision making are as follows:

1) Close to home
2) Health services
3) Sufficient parking
4) Disabled student services
5) Student clubs and organizations
6) My family and friends like the college

Courses Students Are Mostly Likely to Select:

Basic Skills Courses: Learning Skills courses are their top choice, with more Watsonville High School students (27%) selecting them.

Occupational Courses: Of those courses included in the survey, the top 11 choices are: Computer Applications (37%), Criminal Justice (22%), Small Business (22%), Medical Assistant (18%), Early Childhood Education (15%), Microcomputer Technology (15%),

Nursing (15%), Journalism (12%), Drafting (12%), Drama (11%) and Fire Protection Technology (11%). More students from Watsonville High than from Aptos High selected Computer Applications (41% vs. 32%), Small Business (24% vs. 20%), Nursing (16% vs. 13%) and Drafting (13% vs. 10%). On the other hand, more students from Aptos High selected Early Childhood Education (17% vs. 14%). It should be noted that this survey did not include all programs offered.

Transferable Courses: The top 12 choices for transferable courses are: Math (31%), Business (25%), Computer Applications and Office Systems (25%), English (21%), Psychology (20%), Accounting (18%), Music (17%), Computer Science (16%), Engineering (16%), Language other than English or Spanish (14%), Biology (14%), Art and Art History (14%). The differences between the two schools are as follows: more Watsonville High School students than Aptos High School students selected Business (27% vs. 23%), Computer Applications and Office Systems (29% vs. 19%), and Accounting (20% vs. 16%). On the other hand, more Aptos High School students selected these courses: Psychology (26% vs. 14%), and Music (20% vs. 15%).

Personal Interest Courses: The order of selection by the students from both schools is as follows: Photography (20%), Cooking and Nutrition (16%), Music (15%), Creative Writing (15%), Real Estate (14%), Physical Education (12%), Family Relations (11%), Art and Art History (11%), Drama (9%), Health Science (8%) and Aeronautics (7%). Among these selections, more Aptos High School students selected Cooking and Nutrition, Music, Creative Writing, Drama and Health Science. More Watsonville High School students selected Photography, and Real Estate.

Table 1. College Course Selection Rate by Course Types and by High Schools:

| | Both Schools | Aptos High | Watsonville High |
|---|---|---|---|
| **Basic Skills Courses** | | | |
| Learning Skills | 23% | 17% | 27% |
| Reading | 23% | 21% | 24% |
| Counseling and Guidance | 19% | 19% | 20% |
| Developmental Studies | 14% | 13% | 14% |
| **Occupational Courses** | | | |
| Computer Applications | 37% | 32% | 41% |
| Criminal Justice | 22% | 22% | 23% |
| Small Business | 22% | 20% | 24% |
| Medical Assistant | 18% | 17% | 18% |
| Early Childhood Education | 15% | 17% | 14% |
| Microcomputer Technology | 15% | 14% | 16% |
| Nursing | 15% | 13% | 16% |
| Journalism | 12% | 13% | 12% |
| Drafting | 12% | 10% | 13% |
| Drama | 11% | 12% | 10% |
| Fire Protection Technology | 11% | 13% | 9% |
| Construction and Energy Management | 10% | 7% | 13% |
| Archeological Technology | 10% | 8% | 11% |
| Dental Hygiene | 9% | 8% | 9% |

| | | | |
|---|---|---|---|
| Industrial Technology | 9% | 8% | 10% |
| Radiologic Technology | 8% | 6% | 9% |
| Culinary Arts and Hospitality Management | 7% | 8% | 6% |
| Horticulture | 6% | 8% | 4% |
| Hazardous Material Technology | 5% | 6% | 5% |
| **Transfer Courses** | | | |
| Mathematics | 31% | 28% | 27% |
| Business | 25% | 23% | 27% |
| Computer Applications and Office Systems | 25% | 19% | 29% |
| English | 21% | 22% | 21% |
| Psychology | 20% | 26% | 14% |
| Accounting | 18% | 16% | 20% |
| Music | 17% | 20% | 15% |
| Computer Science | 16% | 16% | 16% |
| Engineering | 16% | 15% | 16% |
| Language other than English or Spanish | 14% | 13% | 14% |
| Biology | 14% | 15% | 13% |
| Art and Art History | 14% | 13% | 14% |
| Spanish | 13% | 17% | 11% |
| Chemistry | 13% | 14% | 12% |
| Counseling and Guidance | 12% | 13% | 11% |
| Spanish for Spanish Speakers | 12% | 10% | 13% |
| Physical Education | 11% | 12% | 11% |
| Journalism | 11% | 13% | 10% |
| Literature | 11% | 12% | 10% |
| Early Childhood Education | 11% | 11% | 11% |
| Women's Studies | 11% | 13% | 9% |
| Philosophy | 11% | 15% | 7% |
| Bilingual Bicultural Studies | 10% | 10% | 10% |
| Health Science | 10% | 11% | 10% |
| Speech Communications | 10% | 10% | 10% |
| History | 10% | 13% | 8% |
| English as a Second Language | 10% | 8% | 11% |
| Sign Language Studies | 10% | 11% | 9% |
| Physics | 9% | 10% | 9% |
| Oceanography | 9% | 11% | 8% |
| Drama | 9% | 10% | 8% |
| Astronomy | 9% | 8% | 9% |
| Economics | 9% | 10% | 8% |
| Sociology | 8% | 11% | 5% |
| Political Science | 7% | 8% | 6% |
| Anthropology | 6% | 6% | 5% |
| Geography | 5% | 7% | 3% |
| Geology | 4% | 6% | 4% |
| Meteorology | 4% | 5% | 4% |
| **Personal Interest Courses** | | | |
| Photography | 20% | 18% | 21% |
| Cooking and Nutrition | 16% | 18% | 14% |
| Music | 15% | 18% | 13% |
| Creative Writing | 15% | 17% | 12% |
| Real Estate | 14% | 11% | 15% |

| | | | |
|---|---|---|---|
| Physical Education | 12% | 13% | 11% |
| Family Relations | 11% | 12% | 10% |
| Art and Art History | 11% | 11% | 10% |
| Drama | 9% | 12% | 8% |
| Health Science | 8% | 10% | 7% |
| Aeronautics | 7% | 8% | 6% |

Note: this survey did not include programs of Accounting, General Business, Insurance Specialist, and Medical Transcriptionist.

## Summary

Most of the high school students who come to Cabrillo College to pursue a postsecondary education are bound for four-year colleges. These students will probably attend college immediately after high school. This study indicates that most of the high school students first heard about Cabrillo College from their friends or family; few from the newspaper, radio, or bus ads. One in ten learned about Cabrillo College from the materials sent from the College.

Most of those who will be going to the Watsonville Center cited being close to home or feeling more comfortable there as the reasons. Of those who said they will be going to the Cabrillo main campus, half of them cited a more comprehensive college setting at the main campus, with the ease of taking most of the courses they need as the reasons.

While in many areas there has been little or no difference in their responses, students from Aptos High and Watsonville High do differ in the following ways: 1) school demographics, with more Hispanics studying at Watsonville High; 2) college locations choice, with more students from Watsonville High considering going to the Watsonville Center; 3) over 60% of the students at Aptos High speak English as their first language, yet, at Watsonville High, over 60% of the students are either bilingual or speak Spanish more fluently than English; 4) slightly fewer students from Watsonville High would become full-time students in college; and 5) students from Watsonville High tend to select more courses that are vocational in nature, such as Computer Applications, Small Business, and Nursing.

Regardless of which campus they will be attending, the following six factors seem to weigh heavily in their decision to come to Cabrillo College: 1) Scheduling of classes that will allow them to work while attending college; 2) Classes that meet their interests; 3) Scholarships, grants, loans or jobs on campus; 4) Low-cost fees; 5) Classes transferable to a four-year college (Watsonville High students rated this somewhat lower); and 6) Vocational programs/job training (Watsonville High School students rated this somewhat higher).

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**Cabrillo College**
**Educational Needs Assessment**
**High School Students**
**Fall 1995**

Dear high school student:

Since many of you may be going to college soon, we would like to know what role the Watsonville Center could have in your plans. Please help us in this effort by taking a few minutes of your time to complete this survey. The information you give us will be very valuable in planning future programs and services.

Thank you for your time and cooperation.

**Mark only one response per item using the pencil provided.**

1. Where did you first hear about Cabrillo and/or the Watsonville Center?
   a. my friends and family
   b. materials mailed by the college
   c. my high school teachers
   d. ads in the newspaper, radio, bus
   e. I don't know anything about the college.

2. What is your highest educational goal?
   a. high school diploma
   b. improve my English, math, and reading
   c. obtain a vocational certificate
   d. obtain an A.A./A.S. degree (two-year degree)
   e. obtain a four-year degree or higher

**If you plan to attend college, answer questions 3-7; otherwise, skip to question 32.**

3. When do you plan to enter college?
   a. immediately after high school graduation
   b. a year or two after high school
   c. three to five years after high school
   d. not sure

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4. How will you pay for college?
   a. with my parents' support
   b. I plan to work to pay for my expenses.
   c. I need financial aid (scholarships, loans, grants, work study).
   d. all of the above

5. How many college courses do you plan to take each semester?
   a. fewer than 4 (part-time)
   b. 4 or more (full-time)

6. What general subject area will you study in college?
   a. humanities/art/literature
   b. natural science
   c. social sciences
   d. business/vocational/occupational programs
   e. undecided

7. Are you considering Cabrillo College as a place to begin college?
   a. yes (skip question 8)
   b. no (answer question 8, then skip to question 32
   c. maybe (skip question 8)

8. If you do **NOT** plan to attend Cabrillo College, what are your reasons?
   a. Cabrillo is too far from home.
   b. I am planning on going to a four-year college directly.
   c. I am going to another community college.
   d. I have no plans for college now.

9. Which location of Cabrillo College would you like to attend?
   a. the main campus in Aptos (skip question 11)
   b. the Watsonville Center (skip question 10)
   c. both locations (skip question 10)

10. If you are planning to attend only the Cabrillo main campus in Aptos, please tell us why.
   a. The Watsonville Center does not offer the courses I need.
   b. The Watsonville Center is too close to home.
   c. The main campus is more like a college.
   d. The Watsonville Center does not have the support services I need.
   e. This question does not apply to me.

11. If you are planning to attend the Watsonville Center, please tell us why.
    a. It offers the courses that I need.
    b. It's close to home.
    c. It's more comfortable.
    d. It has bilingual staff and services.

12. Do you want any of your college classes to be bilingual (English/Spanish)?
    a. yes
    b. no
    c. it does not matter

13. What time would you prefer to take classes?
    a. weekday mornings
    b. weekday afternoons
    c. weekday evenings
    d. Saturdays
    e. Sundays

**We would like to know what factors are most influential in your decision to attend the Cabrillo main campus or the Watsonville Center. Please use the following scale: (you may want to read the entire list before you mark your answers)**

**a. Extremely Important**
**b. Important**
**c. Not important**
**d. no opinion/don't know**

14. My family and friends like the college.
15. Academic counseling
16. Career guidance and job placement services
17. Schedule of classes that will allow me to work while attending college.
18. Close to home
19. Classes transfer to a four-year college.
20. Scholarships, grants, loans or jobs on campus
21. Safety and security on the campus
22. Low-cost fees
23. Classes that meet my interests
24. Library services
25. Student clubs and organizations
26. Sufficient parking
27. Disabled student services
28. Tutorial services
29. Vocational programs/job training
30. Bilingual services
31. Health services

32. What grade are you in?
    a. 9th
    b. 10th
    c. 11th
    d. 12th

33. How do you describe yourself?
    a. African American/Black
    b. American Indian/Alaskan Native
    c. Asian/Filipino/Pacific Islander
    d. Hispanic/Latino(a)/Chicano(a)
    e. White/European American

34. What is your overall GPA?
    a. Under 2.0
    b. 2.0 - 3
    c. 3.1 - 4.0
    d. over 4.0

35. What is your gender?
    a. Female
    b. Male

36. What are your English skills?
    a. English is the first language I learned.
    b. I speak English as well as my first language.
    c. I speak English better than my first language.
    d. I speak my first language better than English.

37. What school do you attend?
    a. Watsonville High School
    b. Aptos High School
    c. Renaissance High School

**Cabrillo offers courses in many areas. How likely are you to take a class in each of the following? Mark A if you are likely to take a course in this area; otherwise, do not give an answer**

**Basic Skills Courses**

38. Counseling and Guidance
39. Developmental Studies
40. Learning Skills
41. Reading

**Occupational Courses**

42. Archeological Technology
43. Computer Applications
44. Construction and Energy Management
45. Criminal Justice
46. Culinary Arts and Hospitality Management
47. Dental Hygiene
48. Drafting
49. Drama
50. Early Childhood Education
51. Fire Protection Technology
52. Hazardous Material Technology.
53. Horticulture
54. Industrial Technology
55. Journalism
56. Medical Assistant
57. Microcomputer Technology
58. Nursing
59. Radiologic Technology
60. Small Business

**Transfer Courses**

61. Accounting
62. Anthropology
63. Art and Art History
64. Astronomy
65. Bilingual Bicultural Studies
66. Biology
67. Business
68. Chemistry
69. Computer Applications and Office Systems
70. Computer Science
71. Counseling and Guidance
72. Drama
73. Early Childhood Education
74. Economics
75. Engineering
76. English as a Second Language
77. English
78. Geography
79. Geology
80. Health Science
81. History
82. Journalism
83. Languages other than English or Spanish
84. Literature
85. Mathematics
86. Meteorology
87. Music
88. Oceanography
89. Philosophy
90. Physical Education
91. Physics
92. Political Science
93. Psychology

94 Sign Language Studies
95. Sociology
96. Spanish
97. Spanish for Spanish Speakers
98. Speech Communications
99. Women's Studies

**Personal Interest Courses**

100. Aeronautics
101. Art and Art History
102. Cooking and Nutrition
103. Creative Writing
104. Drama
105. Family Relations
106. Health Science
107. Music
108. Photography
109. Physical Education
11 Real Estate

**Thank you for your cooperation!**

# ANALYSIS OF THE WATSONVILLE CENTER STUDENTS SURVEYS Fall, 1995

-a partial analysis for the Watsonville Center Needs Analysis

Submitted to

The Watsonville Center Needs Analysis Task Force

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Office of Institutional Research
January, 1996

This report is prepared for the Watsonville Center Needs Analysis Task Force. The Office of Institutional Research is in debt to a number of faculty and staff for providing support for the initial survey instrument design and survey administration. Thanks go to Felix Robles, Task Force Chair, for his excellent leadership and hard work in facilitating the survey study. If you have further questions, please contact Jing at the Office of Institutional Research, Cabrillo College, 408/479-5719.

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**Watsonville Center Survey Highlights**
**407 Repondents**

80% Are Hispanic
69% Speak Spanish as their first language
48% Attend classes at the WC because it's close to home
66% Are taking fewer than 3 units at the main campus this fall
22% Would not attend college at all if the WC were not there
8% Would go to another college if the WC were not there
33% Would come to main campus but would take fewer units
40% Would not be persuaded to attend main campus with access to an express bus
72% Prefer the semester system

Courses students are more likely to take:
ESL, Math, Counseling and Guidance, Computer Applications, ECE, Small Business, Medical Assistant, Nursing, Spanish, Criminal Justice.

*The above summary is courtesy of Felix Robles*

# ANALYSIS OF THE WATSONVILLE CENTER STUDENTS SURVEYS--Fall, 1995

-a partial analysis for the Watsonville Center Needs Analysis

Office of Institutional Research, Janurary, 1996

## Introduction

A total of 800 surveys were distributed to the students enrolled in classes at the Watsonville Center or other Cabrillo sites in Watsonville in Fall 1995. By the deadline date, a total of 407 surveys were returned and were subsequently read into a database via a Scantron machine. This report is based on the returned 407 surveys. The rest of the surveys (n=133) returned after the deadline date validated the findings in this report.

## Findings

**Student Background Information:**

Demographics: There are slightly more males (51%) than females (49%) in the returned survey population. This is a different ratio compared to the college general population (57% females and 43% males). A large number of students (43%) are between the ages of 18 and 25. The second large group (26%) are between the ages of 31 and 40, bypassing the age group of 26-30, which constitutes only 18% of the population. This age distribution, however, is similar to the general college statistics. A vast majority of the students (80%) at the Watsonville Center are Hispanic, thirteen percent are Whites, 4% are American Indians, 3% are Asians, and 2% are African Americans. The distribution of Hispanic students is a complete reversal of the general college statistics: 18.6% Hispanics.

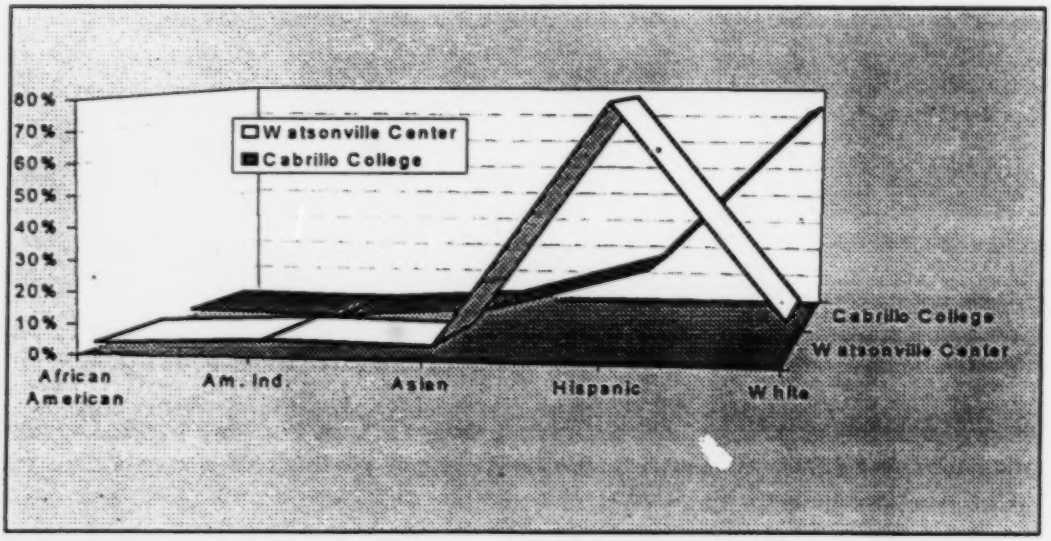


Figure 1. Comparison of Ethnic Distribution between Cabrillo College and the Watsonville Center.



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Language and Education: A large number (69%) of the students in the returned survey population listed Spanish as their first language. Twenty-eight percent identified English as their first language, and only 3% listed another language other than the above. The majority of the students who returned their surveys have obtained either a high school diploma/GED (31%) or gained some college experience (34%). Only 3% of the respondents have received a Bachelor's degree or higher.

Income: Aside from 30% of the respondents who did not report their parental income, and for those who did, 57% of their parents made below $30,000 last year. Regarding their own household income, of the respondents, 26% earned below $8,000 last year, thirty-three percent earned between $8,000 - $15,000 last year, and 23% between $16,000 - $30,000. Only 18% earned more than $31,000 last year.

**Students' Information Associated with the Main Campus and Watsonville Center:**
Main Sources of Information on Cabrillo: Thirty-five percent of the respondents found the schedule of classes to be their main source of information about Cabrillo College. Thirty-three percent identified counselors as their main source, 18% friends and family, and 13% instructors.

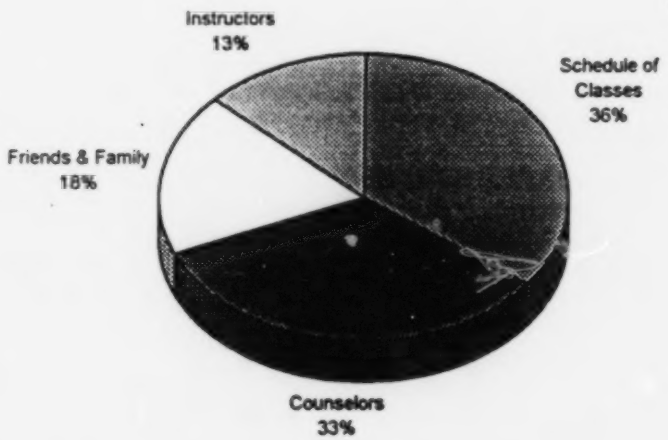


Figure 2. Main Source of Information on Cabrillo College.

When Did They Register for Classes This Fall? One third (33%) of the respondents used priority mail-in registration last spring. Another third (30%) registered in person, and approximately another third (28%) came to register during college-wide in-person registration time. Nine percent were late registrants (first two weeks of classes).

Main Reason to Attend Cabrillo College: Thirty-eight percent selected "transfer to a four-year college" as their main reason. Another 34% chose "gain vocational skills", 14% are

here to "improve basic skills in English, math or reading", and another 14% are in school for personal interest.

Main Reason to Attend Classes in Watsonville: Almost half (48%) reported that they attend classes in Watsonville because they want to be close to where they live and work. Twenty-seven percent attend because the Watsonville Center had the classes they needed. Sixteen percent chose the reason "it is hard to get to Aptos". Three percent chose to be at Watsonville because of "smaller environment", and 6% suggested other reasons.

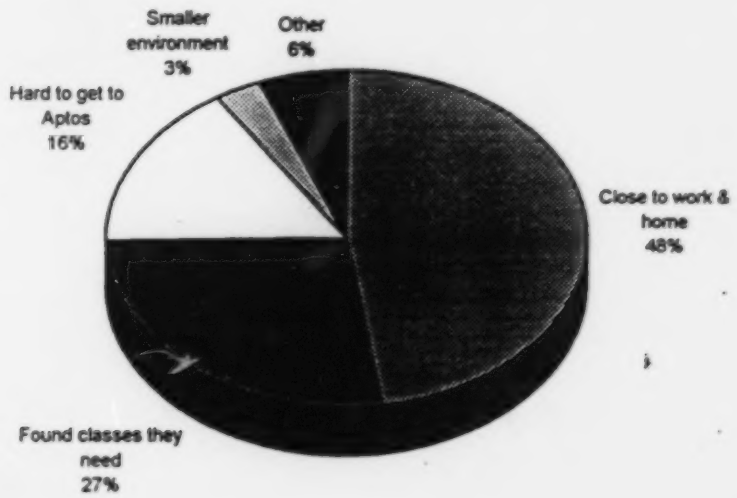


Figure 3. Reasons to attend classes at the Watsonville Center cited by the Center students.

Units Taken at the Main Campus in Aptos and in Watsonville: Almost 2/3 (66%) of the students were taking fewer than 3 units this fall semester at the main campus. Ten percent were taking between 3.5-6 units and 13% 6.5-9 units at the main campus. Seven percent were taking between 9.5-11.5 units this fall at the main and 4% taking more than 12 units. For those who were taking classes in Watsonville, the distribution is 33% (0-3 units), 31% (3.5-6 units), 15% (6.5-9 units), 4% (9.5-11.5 units), and 17% (12 or more units).

What Would They Do, if Cabrillo Did not Have Facilities in Watsonville? Twenty-two percent would not have attended college at all. Another 37% would have come to the main campus, yet another 33% would come to the main campus, but would take fewer units per semester. Eight percent would have gone to another college.

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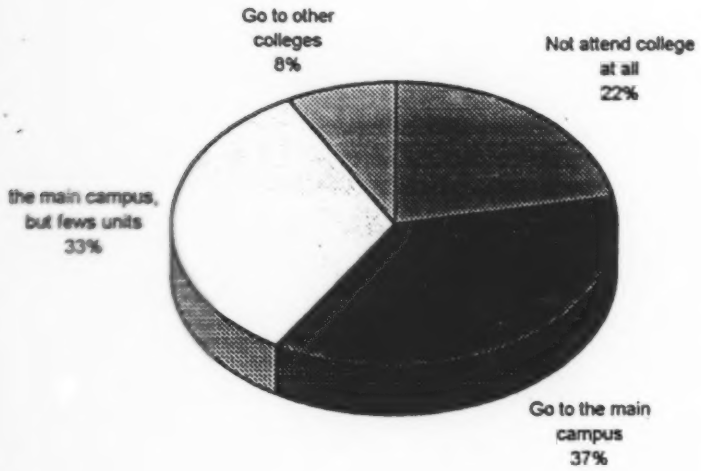


Figure 4. What the Watsonville Center students would have done if Cabrillo College did not have any facilities there.

Would the Express Bus to Aptos Help? Forty percent did not believe the express bus that runs every hour to the main campus in Aptos would persuade them to take classes there. Twenty-five percent felt they would very likely take classes in Aptos, and 33% belonged to the group that felt they would "likely" take classes in Aptos because of the bus.

Commute Mode and Distance of Travel: Most of the students (73%) commute to classes at Watsonville in their own automobiles. This figure does not include the 3% who car pool. Thirteen percent walk to school and 10% take the bus. Only 1% bike to school. Almost half of the respondents (45%) only travel the distance of 1 - 3 miles. Another 29% travel between 3-6 miles. A quarter of the students (26%) come to classes from places located more than 6 miles away.

How Often Are They Able to Take the Courses at Watsonville? A total of 64% of the respondents reported that they were either always or nearly always able to take the classes they needed at Watsonville. Another 17% reported that they usually could get the classes they wanted. Fifteen percent said they seldom could get the classes they wanted and 5% were never able to get the classes they wanted

Course Schedule and Best Time for Classes: Over 72% preferred the semester system for their course schedule. Forty-two percent would like to take classes weekday evenings, 36% preferred weekday mornings, and only 13% weekday afternoons. No one reported that they would like to take classes on Sundays and only 9% liked Saturday classes.

Childcare Needs: More than a quarter (28%) reported that they need childcare during the daytime, another quarter (24%) need childcare in the evenings. Almost half (47%) do not have any childcare needs.

**Ratings of Services on Campus**

There are a total of 13 services provided in the survey for the students to rate regarding the importance of their educational attainment. There are three scales for the rating: 3. extremely important, 2. important, and 1. not important. The outcome of their ratings somehow indicates that they felt all the services are equally important. The actual ratings have been presented in Table 1.

Table 1. Rating of Services on Campus by Watsonville Center Students:

| | |
|---|---|
| Courses that prepare me for my next career/educational goal | 2.8 |
| A schedule of classes that allow me to work while attending college | 2.8 |
| Easy access to registration | 2.7 |
| Courses that will transfer to another college | 2.6 |
| Enough general education courses to meet my needs and interests | 2.6 |
| Tutorial services | 2.5 |
| Drop-in counseling | 2.5 |
| Easy access to bookstore services | 2.4 |
| Vocational programs/job training | 2.4 |
| Access to computer software and hardware | 2.4 |
| Small classes (18-35 students) | 2.4 |
| Bilingual services | 2.3 |
| Services that support my disabilities | 2.3 |

**Courses Watsonville Center Students Are Most Likely to Take:**

Basic Skills Courses: Counseling and Guidance courses are favored by 42% of the students. Forty-one percent of the students also would like to take Learning Skills courses, 37% of the students will take courses in Reading, and 29% in Developmental Studies.

Occupational Courses: The top ten courses students are most likely to take are: Computer Applications (40%), Early Childhood Education (40%), Small Business (27%), Medical Assistant (23%), Nursing (22%), Microcomputer Technology (20%), Criminal Justice (19%), Dental Hygiene (15%), Drafting (15%), and Culinary Arts and Hospitality Management (13%).

Transfer Courses: For university transfer courses, the Watsonville Center/Area students have selected these top ten courses: English as a Second Language (48%), Mathematics (40%), Women's Studies (30%), Spanish (29%), Business (28%), Computer Science (28%), Computer Applications and Office Systems (26%), Biology (26%), Economics (26%), and History (26%).

Personal Interest Courses: The top five choices are Cooking and Nutrition (32%), Family Relations (25%), Physical Education (19%), Health Sciences (18%) and Photography (18%).

Table 2. The Courses the Watsonville Center/Area Students Most Likely will Take:

| Course Types | % | # |
|---|---|---|
| **Basic Skills Courses** | | |
| Basic Skills Courses | | |
| Counseling and Guidance | 42% | 170 |
| Learning Skills | 41% | 167 |
| Reading | 37% | 149 |
| Developmental Studies | 29% | 119 |
| **Occupational Courses** | | |
| Computer Applications | 40% | 161 |
| Early Childhood Education | 40% | 161 |
| Small Business | 27% | 111 |
| Medical Assistant | 23% | 92 |
| Nursing | 22% | 89 |
| Microcomputer Technology | 20% | 80 |
| Criminal Justice | 19% | 76 |
| Dental Hygiene | 15% | 63 |
| Drafting | 15% | 62 |
| Culinary Arts and Hospitality Management | 13% | 51 |
| Radiologic Technology | 11% | 44 |
| Archeological Technology | 10% | 42 |
| Fire Protection Technology | 10% | 39 |
| Horticulture | 9% | 38 |
| Construction and Energy Management | 9% | 36 |
| Journalism | 9% | 36 |
| Industrial Technology | 9% | 35 |
| Drama | 8% | 31 |
| Hazardous Material Technology | 8% | 31 |
| **Transfer Courses** | | |
| English as a Second Language | 48% | 195 |
| mathematics | 40% | 161 |
| Women's Studies | 30% | 121 |
| Spanish | 29% | 117 |
| Business | 28% | 115 |
| Computer Science | 28% | 114 |
| Computer Applications and Office Systems | 26% | 105 |
| Biology | 26% | 104 |
| Economics | 26% | 104 |
| History | 26% | 104 |
| Speech Communications | 26% | 104 |
| Accounting | 25% | 102 |
| Spanish for Spanish Speakers | 24% | 97 |
| Geography | 23% | 92 |
| Art and Art History | 20% | 83 |
| Bilingual Bicultural Studies | 19% | 79 |

| | | |
|---|---|---|
| Meteorology | 19% | 79 |
| Psychology | 19% | 78 |
| Health Science | 19% | 76 |
| Sociology | 18% | 73 |
| English | 18% | 72 |
| Physical Education | 17% | 70 |
| Early Childhood Education | 17% | 69 |
| Chemistry | 16% | 67 |
| Counseling and Guidance | 16% | 67 |
| Literature | 16% | 67 |
| Language other than English or Spanish | 16% | 65 |
| Music | 16% | 65 |
| Political Science | 16% | 64 |
| Physics | 15% | 60 |
| Oceanography | 14% | 59 |
| Philosophy | 13% | 54 |
| Sign Language Studies | 13% | 53 |
| Astronomy | 12% | 49 |
| Journalism | 11% | 46 |
| Drama | 11% | 45 |
| Engineering | 11% | 43 |
| Geology | 11% | 43 |
| Anthropology | 10% | 39 |
| **Personal Interest Courses** | | |
| Cooking and Nutrition | 32% | 132 |
| Family Relations | 25% | 101 |
| Physical Education | 19% | 78 |
| Health Science | 18% | 75 |
| Photography | 18% | 74 |
| Creative Writing | 17% | 69 |
| Real Estate | 16% | 65 |
| Music | 15% | 63 |
| Art and Art History | 11% | 45 |
| Stroke Center | 8% | 33 |
| Drama | 8% | 32 |
| Aeronautics | 5% | 22 |

Note: this survey did not include programs in Accounting, General Business, Insurance Specialist, and Medical Transcriptionist.

## Summary

Compared to the statistics and studies from the main campus, there are a few striking differences between the Watsonville Center students and the main campus students. Most of the Watsonville Center students are Hispanic and most of them speak Spanish as their first language. More students from the Watsonville Center (57%) are from families with an annual income below $30,000, while the figure for Cabrillo College in general is 39%. Compared to a figure of 47% of Cabrillo College students' in general, only a little more than a third of the Center's students plan to transfer. Another third attend college to gain vocational skills.

The differences in the above paragraph, as well as the summaries below, constitute the distinct needs of facilities at the Watsonville Center/Area. If Cabrillo did not have facilities in Watsonville, the College would lose about 30% of current Watsonville students. Of the students who might continue their education by attending the main campus, many of them would take fewer units. Most of the Center's students chose the location simply because it was close to work and home (almost half of the respondents travel less than 3 miles to their classes), or they could take the classes they needed.

The Center's students rated all services currently available at the center as equally important to their educational attainment. Half of them have childcare needs. Some of the top choices for study are: Computer Applications, Early Childhood Education, Small Business, Nursing, ESL, Mathematics, Women's Studies, Spanish, and Business.

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## COMBINED ANALYSIS OF BOTH WATSONVILLE AND HIGH SCHOOL STUDENTS COURSE CHOICES--courtesy of Janet Firth

| Top 3 Ranking of the Course Choices | | | | | | |
|---|---|---|---|---|---|---|
| | Watsonville Center/Area | | Watsonville High School | | Aptos High School | |
| **Basic Skills Courses** | | | | | | |
| Counseling & Guidance | 42% | 1 | 20% | 3 | 19% | 2 |
| Learning Skills | 41% | 2 | 27% | 1 | 17% | 3 |
| Reading | 37% | 3 | 24% | 2 | 21% | 1 |
| Development Studies | 29% | | 14% | | 13% | |
| | | | | | | |
| **Occupational Courses** | | | | | | |
| Computer Applications | 40% | 1 | 41% | 1 | 32% | 1 |
| Early Childhood Education | 40% | 1 | 14% | | 17% | |
| Small Business | 27% | 2 | 24% | 2 | 20% | 3 |
| Medical Assistant | 23% | 3 | 18% | | 17% | |
| Nursing | 22% | | 16% | | 13% | |
| Microcomputer Management | 20% | | 16% | | 14% | |
| Criminal Justice | 19% | | 23% | 3 | 22% | 2 |
| Dental Hygiene | 15% | | 9% | | 8% | |
| Drafting | 15% | | 13% | | 10% | |
| Culinary Arts & Hospitality Mgmt | 13% | | 6% | | 8% | |
| Radiologic Technology | 11% | | 9% | | 6% | |
| Archaeological Technology | 10% | | 11% | | 8% | |
| Fire Protection Technology | 10% | | 9% | | 13% | |
| Horticulture | 9% | | 4% | | 8% | |
| Construction & Energy Mgmt | 9% | | 13% | | 7% | |
| Journalism | 9% | | 12% | | 13% | |
| Industrial Technology | 9% | | 10% | | 8% | |
| Drama | 8% | | 10% | | 12% | |
| Hazardous Material Technology | 8% | | 5% | | 6% | |
| | | | | | | |
| **Transfer Courses** | | | | | | |
| English as a Second Language | 48% | 1 | 11% | | 8% | |
| Mathematics | 40% | 2 | 27% | 2 | 28% | 1 |
| Women's Studies | 30% | 3 | 9% | | 13% | |
| Spanish | 29% | | 11% | | 17% | |
| Business | 28% | | 27% | 2 | 23% | 3 |
| Computer Science | 28% | | 16% | | 16% | |
| Computer Applications & Office Systems | 26% | | 29% | 1 | 18% | |
| Biology | 26% | | 13% | | 15% | |
| Economics | 26% | | 8% | | 10% | |
| History | 26% | | 8% | | 13% | |

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| | | | | | | |
|---|---|---|---|---|---|---|
| Speech Communication | 28% | | 10% | | 10% | |
| Accounting | 25% | | 20% | | 16% | |
| Spanish for Spanish Speakers | 24% | | 13% | | 10% | |
| Geography | 23% | | 3% | | 7% | |
| Art & Art History | 20% | | 14% | | 13% | |
| Bilingual Bicultural Studies | 19% | | 10% | | 10% | |
| Meteorology | 19% | | 4% | | 5% | |
| Psychology | 19% | | 14% | | 26% | 2 |
| Health Science | 19% | | 10% | | 11% | |
| Sociology | 18% | | 5% | | 11% | |
| English | 18% | | 21% | 3 | 22% | |
| Physical Education | 17% | | 11% | | 12% | |
| Early Childhood Education | 17% | | 11% | | 11% | |
| Chemistry | 16% | | 12% | | 14% | |
| Counseling & Guidance | 16% | | 11% | | 13% | |
| Literature | 16% | | 10% | | 12% | |
| Language other than English or Spanish | 16% | | 14% | | 13% | |
| Music | 16% | | 15% | | 20% | |
| Political Science | 16% | | 6% | | 8% | |
| Physics | 15% | | 9% | | 10% | |
| Oceanography | 14% | | 8% | | 11% | |
| Philosophy | 13% | | 7% | | 15% | |
| Sign Language Studies | 13% | | 9% | | 11% | |
| Astronomy | 12% | | 9% | | 8% | |
| Journalism | 11% | | 10% | | 13% | |
| Drama | 11% | | 8% | | 10% | |
| Engineering | 11% | | 16% | | 15% | |
| Geology | 11% | | 4% | | 6% | |
| Anthropology | 10% | | 5% | | 6% | |
| | | | | | | |
| Personal Interest Courses | | | | | | |
| Cooking & Nutrition | 32% | 1 | 14% | 3 | 18% | 1 |
| Family Relations | 25% | 2 | 10% | | 12% | |
| Physical Education | 19% | 3 | 11% | | 13% | 3 |
| Health Science | 18% | | 7% | | 10% | |
| Photography | 18% | | 21% | 1 | 18% | 1 |
| Creative Writing | 17% | | 12% | | 17% | 2 |
| Real Estate | 16% | | 15% | 2 | 11% | |
| Music | 15% | | 13% | | 18% | 1 |
| Art & Art History | 11% | | 10% | | 11% | |
| Stroke Center | 8% | | | | | |
| Drama | 8% | | 8% | | 12% | |
| Aeronautics | 5% | | 6% | | 8% | |

**Cabrillo College, Watsonville Center**
**Educational Needs Assessment**
**Fall 1995**

Dear Watsonville Center Student:

Thank you for taking the time to complete this survey. Your comments are very important to us! The information you give will help us meet the educational needs of this community.

**Mark only one response per item using the pencil provided.**

Cabrillo offers various services to help you meet your educational goals. Using the statements that follow, please indicate the importance for each one of them.

**a. extremely important**
**b. important**
**c. not important**

1. Courses that prepare me for my next career/educational goal
2. Easy access to registration
3. Easy access to bookstore services
4. A schedule of classes that allow me to work while attending college.
5. Courses that will transfer to another college
6. Vocational programs/job training
7. Bilingual services
8. Enough general education courses to meet my needs and interests
9. Tutorial services
10. Access to computer software and hardware
11. Services that support my disabilities
12. Small classes (18-35 students)
13. Drop-in counseling

14. What is the main reason that you attend Cabrillo? (mark only one)

a. transfer to a four-year college
b. gain vocational skills
c. personal interest
d. improve basic skills in English, math or reading.

15. What is the main reason you attend classes in Watsonville?

a. I want to be close to where I live or work
b. It's hard to get to Aptos.
c. It has the classes that I need
d. I prefer the smaller environment.
e. other

16. If Cabrillo did not have facilities in Watsonville, what would you do to continue your education?

a. I would not attend college at all.
b. I would go to Cabrillo College in Aptos and take the same number of units per semester.
c. I would go to Cabrillo College in Aptos but take fewer units per semester.
d. I would attend a different college.

17. If you could take the express bus that runs every hour to the Aptos campus, would you take classes there?

a. very likely
b. likely
c. unlikely

18. What source did you use to get most of your information about services at Cabrillo?

a. counselors
b. instructors
c. the schedule of classes
d. friends and family

19. When did you register for classes this fall?

a. during priority mail-in registration last spring
b. during in-person registration for Watsonville Center classes only
c. in August, during college-wide in-person registration
d. during late registration (1st 2 weeks of classes)

20. How often have you been able to take the courses you need in Watsonville?

a. always
b. nearly always (80%-90% of the time)
c. usually (60%-70% of the time)
d. seldom (40%-50% of the time)
e. almost never

21. What course schedule would be most convenient for you?
    a. semester system
    b. short intensive courses

22. What time do you prefer to take classes?
    a. weekday mornings
    b. weekday afternoons
    c. weekday evenings
    d. Saturdays
    e. Sundays

23. How far do you have to travel to attend class in Watsonville?
    a. 0 - 3 miles
    b. 3 - 6 miles
    c. more than 6 miles

24. How do you get to your class in Watsonville?
    a. car
    b. bus
    c. walk
    d. bike
    e. car pool

25. How many units are you taking this semester Watsonville?
    a. 0 - 3
    b. 3.5 - 6
    c. 6.5 - 9
    d. 9.5 - 11.5
    e. 12 or more

26. How many units are you taking this semester at the main campus in Aptos?
    a. 0 - 3
    b. 3.5 - 6
    c. 6.5 - 9
    d. 9.5 - 11.5.
    e. 12 or more

27. Would you use child-care facilities if provided?
    a. yes (in the daytime)
    b. yes (in the evening)
    c. no

**Information about you**

28. How much education do you have?
    a. some elementary school
    b. some high school
    c. high school diploma or GED
    d. some college
    e. Bachelor's degree or higher

29. My first language is:
    a. English
    b. Spanish
    c. other

30. How old are you?
    a. younger than 18
    b. 18-25
    c. 26-30
    d. 31-40
    e. 41 or over

31. What is your gender?
    a. female
    b. male

32. How do you describe yourself?
    a. African American/Black
    b. American Indian/Alaskan Native
    c. Asian/Filipino/Pacific Islander
    d. Hispanic/Latino(a)/Chicano(a)
    e. White/European American

33. Your parents' yearly income:
    a. less than $15,000
    b. $15,000 - $30,000
    c. $31,000 - $50,000
    d. more than $50,000
    e. don't know

34. Your household yearly income:
    a. less than $8000
    b. $8,000 - $15,000
    c. $16,000 - $30,000
    d. $31,000 - $50,000
    e. more than $50,000

**Cabrillo offers courses in many areas. How likely are you to take a class in each of the following? Mark A if you are likely to take a course in this area; otherwise, do not give an answer**

## I. Basic Skills Courses

35. Counseling and Guidance
36. Developmental Studies
37. Learning Skills
38. Reading

## II. Occupational Courses

39. Archeological Technology
40. Computer Applications
41. Construction and Energy Management
42. Criminal Justice
43. Culinary Arts and Hospitality Management
44. Dental Hygiene
45. Drafting
46. Drama
47. Early Childhood Education
48. Fire Protection Technology
49. Hazardous Material Technology.
50. Horticulture
51. Industrial Technology
52. Journalism
53. Medical Assistant
54. Microcomputer Technology
55. Nursing
56. Radiologic Technology
57. Small Business

## III. Transfer Courses

58. Accounting
59. Anthropology
60. Art and Art History
61. Astronomy
62. Bilingual Bicultural Studies
63. Biology
64. Business
65. Chemistry
66. Computer Applications and Office Systems
67. Computer Science
68. Counseling and Guidance
69. Drama
70. Early Childhood Education
71. Economics
72. Engineering
73. English as a Second Language
74. English
75. Geography
76. Geology
77. Health Science
78. History
79. Journalism
80. Languages other than English or Spanish
81. Literature
82. Mathematics
83. Meteorology
84. Music
85. Oceanography
86. Philosophy
87. Physical Education
88. Physics
89. Political Science
90. Psychology
91. Sign Language Studies
92. Sociology
93. Spanish
94. Spanish for Spanish Speakers
95. Speech Communications
96. Women's Studies

## IV. Personal Interest Courses

97. Aeronautics
98. Art and Art History
99. Cooking and Nutrition
100. Creative Writing
101. Drama
102. Family Relations
103. Health Science
104. Music
105. Photography
106. Physical Education
107. Real Estate
108. Stroke Center

**Thank you for your cooperation!**

# Report of the Initial Longitudinal Student Cohort Tracking for the Needs Analysis of the Watsonville Center Fall, 1995

Submitted to

The Watsonville Center Needs Analysis Task Force

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Office of Institutional Research
Computing Resources
January, 1996

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## MAJOR HIGHLIGHTS IN THIS REPORT

Group I First time students enrolled at the Watsonville Center only:
181 Students

71% Hispanic
86% Come from South County
49% Declared that English is not their primary language
Enrolled for the fewest number of units
Students tend to be older
51% Step out or drop out

Group II First time student enrolled at the WC and main campus:
119 Students

50% Hispanic
73% Come from South County
24% Declared that English is not their primary language
49% Became main campus students by the second semester
Much lower drop out rate

Group III First time student enrolled at main campus:
3,221 Students

17% Hispanic
12% Are from South County
4% Declared that English is not their primary language
This group continues to enroll at main campus. Only a negligible number (5 students) ever enrolled at the Watsonville Center.

*The above summary is courtesy of Felix Robles*

# Report of the Initial Longitudinal Student Cohort Tracking for the Needs Analysis of the Watsonville Center--Fall, 1995

Offices of Institutional Research & Computing Resources, January, 1996

## Introduction

Following the behavior of a particular student cohort through multiple semesters has been a long standing issue in educational research. Due to limited time and manpower, college administrators often base their policy research and conclusions on single semester student reports. Questions such as what students, and at what point the students drop out of school, or what patterns of enrollment that are exhibited by a particular group cannot be answered readily by these reports, unless a special effort is made to follow a cohort and observe them for a reasonably extended period of time.

Research of this kind depends on a comprehensive and user friendly data base, resembling the MIS project. The Computing Resources Department proposed the concept of Data Warehouse in the summer of 1995. Since then, Al Holbert, Mike Satren and Sue Woosley have spent many weeks streamlining the structure of the warehouse and validating various data elements stored in separate datasets. With the establishment of the Cabrillo College Data Warehouse, cohort tracking became possible. In responding to the research request for the Watsonville Center Needs Analysis, the Office of Institutional Research and Computing Resources, using the Data Warehouse, made their first attempt in identifying a cohort and following them for as long as the data allowed. For this study, the earliest accessible historical data dated back to the semester in fall of 1992.

The Office of Institutional Research provided the basic design of cohort tracking. In this study, the cohort under study has been defined as the group of students who were first time Cabrillo/Watsonville students in Fall, 1992. Enrollment at any given location is defined by the location where the classes were physically offered. Six semesters of research information is available on these students (from Fall 1992 to Spring 1995). Students in this cohort have been separated into three groups with Group One and Group Two being the focus of this study.

Group One: First time Cabrillo students enrolled exclusively at the Watsonville Center/Area (Watsonville);
Group Two: First time Cabrillo students enrolled at both Watsonville and the main campus in Aptos (main campus);
Group Three: First time Cabrillo students enrolled exclusively at the main campus.

## Findings

**Part One: General Description of the Groups.**

Group One Demographics: There were a total of 181 first time students enrolled at Watsonville (Group One). Among them, 128 were Hispanic students which constituted

71% of the population. There were more females (n=123, or 68%) than males in this group. The vast majority of this group came from South County (n=155, or 86%). Almost half of them (49%) declared that English was not their first language. The majority of them (n=135, or 75%) were high school graduates. Their educational goal showed that they were mainly in school for the purpose of: 1) discovering/formulating career interest and plans; 2) preparing for a new job/career; and 3) improving their basic skills in English, math, and reading.

Group Two Demographics: There were a total of 119 first time students enrolled at both Watsonville and the main campus in Aptos (Group Two). Among them, 60 students (50%) were Hispanic. In this group, 77 (65%) were females and 42 were males. Eighty-seven students (73%) were from South County. Only 24% (n=28) of these declared that English was not their first language. Almost all (n=106, or 89%) were high school graduates. Their educational goal indicated that many were in school for personal interest, and a number of them were undecided about their study plans.

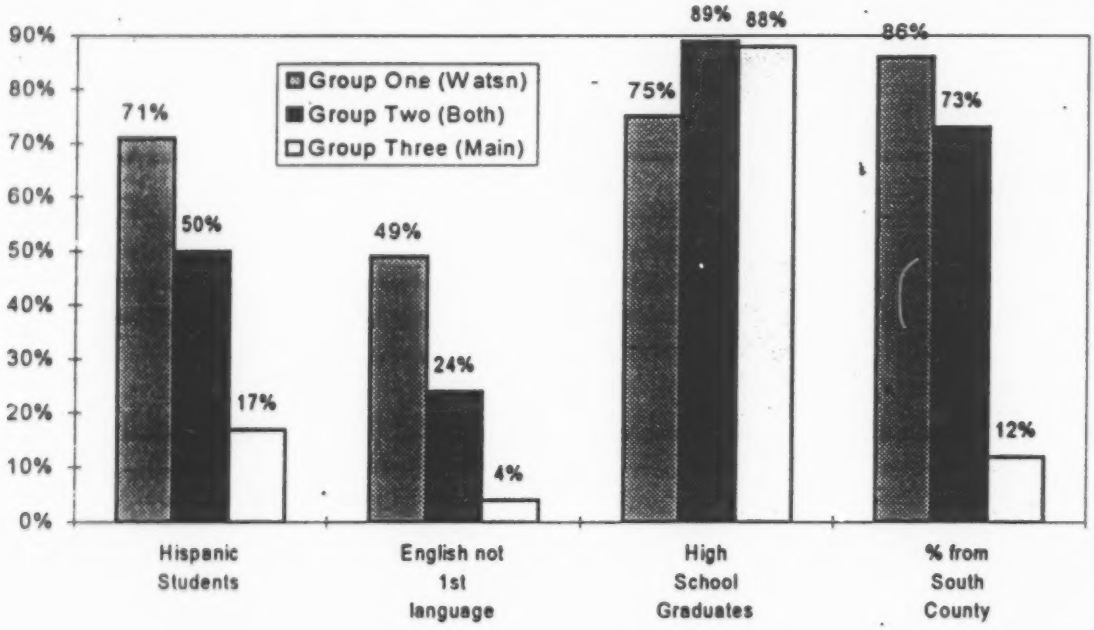


Figure 1, demographic comparison among three groups (Fall, 1992).

Group Three Demographics: There were a total of 3,221 first time students enrolled exclusively at the main campus (Group Three) in Fall, 1992. Among them, only 17% (n=431) were Hispanic students. In this group, 1,701 (53%) were female students. Only 12% (n=390) of the students were from South County. A fraction (4%) declared that English is not their first language. The overwhelming majority (2,831, or 88%) were high school graduates. Their educational goal seem to suggest that they were in school for the

purpose of 1) personal interest; 2) maintaining a certificate or license; 3) transferring to a four-year college; 4) to receive a vocational certificate; 5) discovering/formulating career interest and plans. One in every ten were undecided about their goals.

**Part Two: Longitudinal Analysis of the Cohort Behavior in Six Semesters.**

According to Table 2, Group One (Watsonville Only group) had the lowest average number of units for the first semester when they enrolled. Group Two (enrollment at both locations) had the highest average number of units. Group One students tend to be older, with females having the highest average age of all groups. If Group Two can be viewed primarily as a sub-group for Group One, then it is the younger students who tend to take classes at the main campus while enrolled at Watsonville.

Table 2. The Average of Units and Age of the Three Groups (Fall 1992).

| | Units | | Age | |
|---|---|---|---|---|
| | female | male | female | male |
| Watsonville | 5.00 | 4.45 | 31.4 | 29.3 |
| Both | 7.57 | 7.45 | 24.2 | 25.7 |
| Main campus | 5.74 | 5.41 | 27.4 | 26.3 |

For students from Group One (those enrolled at Watsonville exclusively), in the Fall of 1992, only a quarter were still exclusively enrolled by the following Spring semester. Another 10% of the group started taking classes at the main campus. Fourteen percent became exclusive main campus students. More than half of the original cohort of Group One (51%) either dropped out or stopped out.

Table 3. Overview of the Cohort Movements in Six Semesters:

| | FA92 | SP93 | | FA93 | | SP94 | | FA94 | | SP95 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| G 1: Watsonville Only | | | | | | | | | | | |
| Watsonville | 181 | 45 | 25% | 23 | 13% | 18 | 10% | 15 | 8% | 18 | 10% |
| Both | | 19 | 10% | 14 | 8% | 13 | 7% | 9 | 5% | 12 | 7% |
| Main campus | | 25 | 14% | 21 | 12% | 17 | 9% | 18 | 10% | 17 | 9% |
| Out of school | | 92 | 51% | 123 | 68% | 133 | 73% | 139 | 77% | 134 | 74% |
| G 2: Both | | | | | | | | | | | |
| Watsonville | | 9 | 8% | 4 | 3% | 5 | 4% | 3 | 3% | 3 | 3% |
| Both | 119 | 21 | 18% | 13 | 11% | 15 | 13% | 14 | 12% | 10 | 8% |
| Main campus | | 58 | 49% | 50 | 42% | 35 | 29% | 20 | 17% | 22 | 18% |
| Out of school | | 31 | 26% | 52 | 44% | 64 | 54% | 82 | 69% | 84 | 71% |
| G 3: Main Campus | | | | | | | | | | | |
| Watsonville | | 6 | 0.2% | 3 | 0.1% | 5 | 0.2% | 5 | 0.2% | 5 | 0.2% |
| Both | | 48 | 1% | 26 | 1% | 31 | 1% | 27 | 1% | 30 | 1% |
| Main campus | 3221 | 1777 | 55% | 1190 | 37% | 1014 | 31% | 780 | 24% | 688 | 21% |
| Out of school | | 1390 | 43% | 2002 | 62% | 2171 | 67% | 2409 | 75% | 2498 | 78% |

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By the third semester (Fall 1993), the number of students in Group One reduced to 13% of the original cohort. Almost 2/3 (68%) of the students either dropped out or stopped out--one year after they came to the college. However, the enrollment pattern did not change much over the next few semesters, except for the "Out of School" group, which increased to around 75% of the original cohort. Due to the limitation of the current data available in the warehouse, it is not possible to count how many of them in this group actually received their degrees or transferred to a four-year college. It is safe to assume, however, that those who left school in their first year most likely did not receive a degree or enough transfer units. Therefore, it can be assumed that the drop-out rate for Group One (Watsonville Only Group) is at least 50%.

For Group Two, those students who enrolled at both Watsonville and the main campus in Aptos in the Fall of 1992, almost half (49%) became the main campus students in the following Spring semester. One in ten (8%) became an exclusive Watsonville student. Again, after the drastic change of enrollment occurred after the first semester, sometimes the second semester as well, enrollment change became gradual. The difference between Group One and Group Two is that Group Two seemed to have followed a less drastic increase in the number of "Out of School" students. Further, this figure never reached as high as Group One did. It is safe to assume that Group Two's drop-out rate is not as high as Group One (51%).

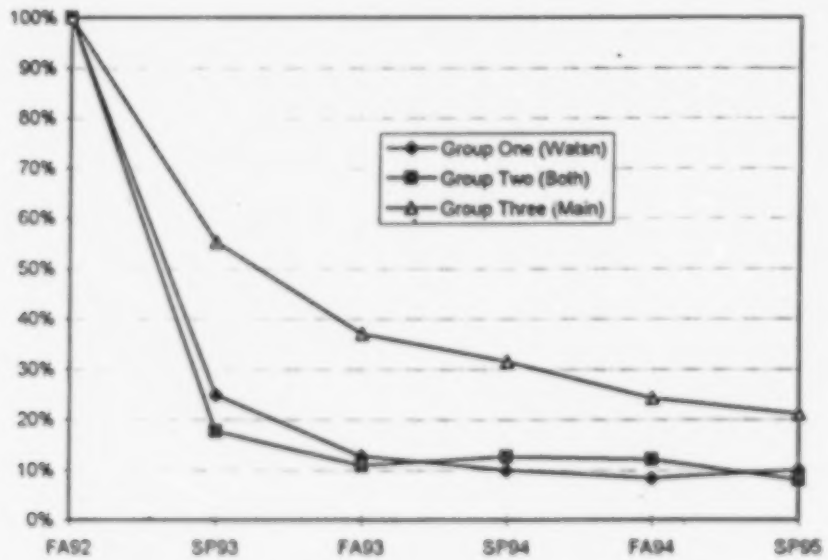


Figure 2. Enrollment change within the original location by semesters and by groups.

Group Three, those who were enrolled at the main campus exclusively in the Fall of 1992, "rarely" became an exclusive Watsonville student. Very few took classes at the Watsonville Center. The drastic reduction in enrollment occurred in the second and third semester, and only 55% were still enrolled by the immediate Spring semester. This

number became 37% exactly one year later. Following the same assumption that few students will likely receive a degree/certificate or accumulate enough transfer units within just two semesters of study, this group's drop out rate is somewhere between Group One and Group Two.

## Summary

The initial analysis of the longitudinal records of students over a span of six semesters suggests that there is a large and distinct difference in demographics, educational goals, and, perhaps, other related areas between the students who are Watsonville students and those who are not. The drop-out rate for Watsonville only students is possibly as high as 50%. Higher ratios of students, especially younger students, "migrate" from Watsonville to the main campus, and not the other way round.

It is clear that students from South County tend to enroll at Watsonville, which creates a definite need for additional educational services. An overwhelming majority of the students at Watsonville are Hispanic. From this study, it appears that students enrolled at Watsonville are at a somewhat higher risk of dropping out or not completing their program.

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MALES ONLY

CABRILLO COLLEGE
WATSONVILLE CENTER STUDY
NOVEMBER 1995

| | WATSONVILLE ONLY COHORT | | | | WATSONVILLE/CABRILLO COHORT | | | | CABRILLO ONLY COHORT | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LOCATION | COUNT | AVE AGE | HISP | WHITE | COUNT | AVE AGE | HISP | WHITE | COUNT | AVE AGE | HISP | WHITE |
| TERM-953 | | | | | | | | | | | | |
| WATS ONLY | 4 | 36.56 | 4 | 0 | 1 | 22.17 | 1 | 0 | 2 | 22.42 | 1 | 1 |
| BOTH | 4 | 30.25 | 4 | 0 | 4 | 33.11 | 4 | 0 | 11 | 24.12 | 7 | 2 |
| CABR ONLY | 10 | 31.26 | 6 | 3 | 5 | 22.23 | 4 | 1 | 307 | 26.15 | 51 | 229 |
| TOTAL | 18 | 32.21 | 14 | 3 | 10 | 26.57 | 9 | 1 | 320 | 26.05 | 59 | 232 |

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MALES ONLY

**CABRILLO COLLEGE**
**WATSONVILLE CENTER STUDY**
**NOVEMBER 1995**

| | WATSONVILLE ONLY COHORT | | | | WATSONVILLE/CABRILLO COHORT | | | | CABRILLO ONLY COHORT | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LOCATION | COUNT | AVE AGE | HISP | WHITE | COUNT | AVE AGE | HISP | WHITE | COUNT | AVE AGE | HISP | WHITE |
| TERM=927 | | | | | | | | | | | | |
| WATS ONLY | 58 | 32.32 | 44 | 12 | 0 | ***** | 0 | 0 | 0 | ***** | 0 | 0 |
| BOTH | 0 | ***** | 0 | 0 | 42 | 28.73 | 21 | 19 | 0 | ***** | 0 | 0 |
| CABR ONLY | 0 | ***** | 0 | 0 | 0 | ***** | 0 | 0 | 1520 | 29.34 | 223 | 1183 |
| TOTAL | 58 | 32.32 | 44 | 12 | 42 | 28.73 | 21 | 19 | 1520 | 29.34 | 223 | 1183 |
| TERM=933 | | | | | | | | | | | | |
| WATS ONLY | 16 | 29.97 | 15 | 1 | 4 | 31.32 | 4 | 0 | 3 | 23.54 | 2 | 1 |
| BOTH | 7 | 32.21 | 6 | 1 | 6 | 24.14 | 3 | 3 | 28 | 28.36 | 11 | 14 |
| CABR ONLY | 10 | 29.76 | 5 | 3 | 21 | 28.20 | 7 | 12 | 827 | 27.72 | 123 | 643 |
| TOTAL | 33 | 30.38 | 26 | 5 | 31 | 27.82 | 14 | 15 | 858 | 27.72 | 136 | 658 |
| TERM=937 | | | | | | | | | | | | |
| WATS ONLY | 8 | 31.53 | 8 | 0 | 1 | 22.17 | 1 | 0 | 0 | ***** | 0 | 0 |
| BOTH | 6 | 28.11 | 5 | 1 | 2 | 52.70 | 1 | 1 | 12 | 26.22 | 8 | 4 |
| CABR ONLY | 7 | 30.86 | 6 | 1 | 21 | 23.75 | 11 | 8 | 540 | 27.38 | 75 | 422 |
| TOTAL | 21 | 30.33 | 19 | 2 | 24 | 26.10 | 13 | 9 | 552 | 27.35 | 83 | 426 |
| TERM=943 | | | | | | | | | | | | |
| WATS ONLY | 10 | 32.40 | 10 | 0 | 2 | 21.71 | 2 | 0 | 1 | 25.78 | 1 | 0 |
| BOTH | 3 | 31.33 | 2 | 1 | 2 | 30.38 | 2 | 0 | 9 | 25.66 | 6 | 1 |
| CABR ONLY | 9 | 29.61 | 7 | 1 | 17 | 24.53 | 8 | 7 | 485 | 26.46 | 78 | 370 |
| TOTAL | 22 | 31.11 | 19 | 2 | 21 | 24.82 | 12 | 7 | 495 | 26.44 | 85 | 371 |
| TERM=947 | | | | | | | | | | | | |
| WATS ONLY | 4 | 34.35 | 4 | 0 | 2 | 28.80 | 2 | 0 | 0 | ***** | 0 | 0 |
| BOTH | 3 | 24.73 | 3 | 0 | 4 | 29.00 | 3 | 0 | 10 | 24.70 | 8 | 1 |
| CABR ONLY | 8 | 31.87 | 4 | 3 | 6 | 27.30 | 4 | 2 | 345 | 26.76 | 55 | 255 |
| TOTAL | 15 | 31.11 | 11 | 3 | 12 | 28.12 | 9 | 2 | 355 | 26.70 | 63 | 256 |

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MALES & FEMALES

CABRILLO COLLEGE
WATSONVILLE CENTER STUDY
NOVEMBER 1995

| LOCATION | WATSONVILLE ONLY COHORT COUNT | AVE AGE | HISP | WHITE | WATSONVILLE/CABRILLO COHORT COUNT | AVE AGE | HISP | WHITE | CABRILLO ONLY COHORT COUNT | AVE AGE | HISP | WHITE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TERM=953 | | | | | | | | | | | | |
| WATS ONLY | 18 | 35.30 | 17 | 1 | 3 | 28.40 | 2 | 1 | 5 | 23.16 | 3 | 1 |
| BOTH | 12 | 28.08 | 11 | 1 | 10 | 27.27 | 10 | 0 | 30 | 22.69 | 19 | 9 |
| CABR ONLY | 17 | 29.55 | 11 | 3 | 22 | 24.06 | 13 | 7 | 688 | 26.83 | 97 | 537 |
| TOTAL | 47 | 31.38 | 39 | 5 | 35 | 25.35 | 25 | 8 | 723 | 26.64 | 119 | 547 |

MALES & FEMALES

**CABRILLO COLLEGE**
**WATSONVILLE CENTER STUDY**
**NOVEMBER 1995**

| | WATSONVILLE ONLY COHORT | | | | WATSONVILLE/CABRILLO COHORT | | | | CABRILLO ONLY COHORT | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LOCATION | COUNT | AVE AGE | HISP | WHITE | COUNT | AVE AGE | HISP | WHITE | COUNT | AVE AGE | HISP | WHITE |
| TERM=927 | | | | | | | | | | | | |
| WATS ONLY | 181 | 33.74 | 128 | 47 | 0 | ***** | 0 | 0 | 0 | ***** | 0 | 0 |
| BOTH | 0 | ***** | 0 | 0 | 119 | 27.72 | 60 | 53 | 0 | ***** | 0 | 0 |
| CABR ONLY | 0 | ***** | 0 | 0 | 0 | ***** | 0 | 0 | 3221 | 29.88 | 431 | 2526 |
| TOTAL | 181 | 33.74 | 128 | 47 | 119 | 27.72 | 60 | 53 | 3221 | 29.88 | 431 | 2526 |
| TERM=933 | | | | | | | | | | | | |
| WATS ONLY | 45 | 30.37 | 40 | 4 | 9 | 28.09 | 9 | 0 | 6 | 32.10 | 2 | 3 |
| BOTH | 19 | 28.06 | 15 | 2 | 21 | 23.73 | 9 | 10 | 48 | 27.31 | 21 | 23 |
| CABR ONLY | 25 | 35.82 | 15 | 8 | 58 | 27.56 | 25 | 29 | 1777 | 27.95 | 229 | 1401 |
| TOTAL | 89 | 31.41 | 70 | 14 | 88 | 26.70 | 43 | 39 | 1831 | 27.95 | 252 | 1427 |
| TERM=937 | | | | | | | | | | | | |
| WATS ONLY | 23 | 34.76 | 21 | 2 | 4 | 26.16 | 3 | 1 | 3 | 27.61 | 3 | 0 |
| BOTH | 14 | 29.80 | 12 | 2 | 13 | 30.86 | 7 | 5 | 26 | 24.17 | 20 | 6 |
| CABR ONLY | 21 | 29.59 | 16 | 3 | 50 | 23.90 | 27 | 18 | 1190 | 27.86 | 152 | 942 |
| TOTAL | 58 | 31.69 | 49 | 7 | 67 | 25.38 | 37 | 24 | 1219 | 27.78 | 175 | 948 |
| TERM=943 | | | | | | | | | | | | |
| WATS ONLY | 18 | 33.04 | 18 | 0 | 5 | 21.68 | 4 | 1 | 5 | 24.47 | 3 | 2 |
| BOTH | 13 | 27.90 | 12 | 1 | 15 | 26.75 | 10 | 4 | 31 | 24.38 | 19 | 10 |
| CABR ONLY | 17 | 31.14 | 12 | 2 | 35 | 24.20 | 16 | 14 | 1014 | 26.76 | 141 | 796 |
| TOTAL | 48 | 30.97 | 42 | 3 | 55 | 24.67 | 30 | 19 | 1050 | 26.68 | 163 | 808 |
| TERM=947 | | | | | | | | | | | | |
| WATS ONLY | 15 | 33.94 | 14 | 1 | 3 | 26.24 | 3 | 0 | 5 | 26.20 | 4 | 1 |
| BOTH | 9 | 28.46 | 9 | 0 | 14 | 24.48 | 10 | 2 | 27 | 23.34 | 20 | 6 |
| CABR ONLY | 18 | 28.32 | 11 | 4 | 20 | 25.45 | 11 | 7 | 780 | 27.06 | 105 | 605 |
| TOTAL | 42 | 30.[illegible] | 34 | 5 | 37 | 25.15 | 24 | 9 | 812 | 26.93 | 129 | 612 |

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FEMALES ONLY

**CABRILLO COLLEGE**
**WATSONVILLE CENTER STUDY**
**NOVEMBER 1995**

| | WATSONVILLE ONLY COHORT | | | | WATSONVILLE/CABRILLO COHORT | | | | CABRILLO ONLY COHORT | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LOCATION | COUNT | AVE AGE | HISP | WHITE | COUNT | AVE AGE | HISP | WHITE | COUNT | AVE AGE | HISP | WHITE |
| TERM=927 | | | | | | | | | | | | |
| WATS ONLY | 123 | 34.41 | 84 | 35 | 0 | ***** | 0 | 0 | 0 | ***** | 0 | 0 |
| BOTH | 0 | ***** | 0 | 0 | 77 | 27.16 | 39 | 34 | 0 | ***** | 0 | 0 |
| CABR ONLY | 0 | ***** | 0 | 0 | 0 | ***** | 0 | 0 | 1701 | 30.37 | 208 | 1343 |
| TOTAL | 123 | 34.41 | 84 | 35 | 77 | 27.16 | 39 | 34 | 1701 | 30.37 | 208 | 1343 |
| TERM=933 | | | | | | | | | | | | |
| WATS ONLY | 29 | 30.60 | 25 | 3 | 5 | 25.51 | 5 | 0 | 3 | 40.67 | 0 | 2 |
| BOTH | 12 | 25.65 | 9 | 1 | 15 | 23.57 | 6 | 7 | 20 | 25.85 | 10 | 9 |
| CABR ONLY | 15 | 39.86 | 10 | 5 | 37 | 27.19 | 18 | 17 | 950 | 28.15 | 106 | 758 |
| TOTAL | 56 | 32.02 | 44 | 9 | 57 | 26.09 | 29 | 24 | 973 | 28.14 | 116 | 769 |
| TERM=937 | | | | | | | | | | | | |
| WATS ONLY | 15 | 36.49 | 13 | 2 | 3 | 27.49 | 2 | 1 | 3 | 27.61 | 3 | 0 |
| BOTH | 8 | 31.06 | 7 | 1 | 11 | 26.89 | 6 | 4 | 14 | 22.41 | 12 | 2 |
| CABR ONLY | 14 | 28.96 | 10 | 2 | 29 | 24.00 | 16 | 10 | 650 | 28.26 | 77 | 520 |
| TOTAL | 37 | 32.47 | 30 | 5 | 43 | 24.99 | 24 | 15 | 667 | 28.13 | 92 | 522 |
| TERM=943 | | | | | | | | | | | | |
| WATS ONLY | 8 | 33.83 | 8 | 0 | 3 | 21.65 | 2 | 1 | 4 | 24.15 | 2 | 2 |
| BOTH | 10 | 26.87 | 10 | 0 | 13 | 26.19 | 8 | 4 | 22 | 23.86 | 13 | 9 |
| CABR ONLY | 8 | 32.85 | 5 | 1 | 18 | 23.89 | 8 | 7 | 529 | 27.04 | 63 | 426 |
| TOTAL | 26 | 30.85 | 23 | 1 | 34 | 24.57 | 18 | 12 | 555 | 26.90 | 78 | 437 |
| TERM=947 | | | | | | | | | | | | |
| WATS ONLY | 11 | 33.79 | 10 | 1 | 1 | 21.13 | 1 | 0 | 5 | 26.20 | 4 | 1 |
| BOTH | 6 | 30.32 | 6 | 0 | 10 | 22.67 | 7 | 2 | 17 | 22.54 | 12 | 5 |
| CABR ONLY | 10 | 25.48 | 7 | 1 | 14 | 24.66 | 7 | 5 | 435 | 27.30 | 50 | 350 |
| TOTAL | 27 | 29.94 | 23 | 2 | 25 | 23.72 | 15 | 7 | 457 | 27.11 | 66 | 356 |

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WATSONVILLE CENTER STUDY
NOVEMBER 1995

| | WATSONVILLE ONLY COHORT | | | | WATSONVILLE/CABRILLO COHORT | | | | CABRILLO ONLY COHORT | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LOCATION | COUNT | AVE AGE | HISP | WHITE | COUNT | AVE AGE | HISP | WHITE | COUNT | AVE AGE | HISP | WHITE |
| TERM=953 | | | | | | | | | | | | |
| WATS ONLY | 14 | 34.94 | 13 | 1 | 2 | 31.51 | 1 | 1 | 3 | 23.65 | 2 | 0 |
| BOTH | 8 | 26.99 | 7 | 1 | 6 | 23.38 | 6 | 0 | 19 | 21.87 | 12 | 7 |
| CABR ONLY | 7 | 27.11 | 5 | 0 | 17 | 24.60 | 9 | 6 | 381 | 27.39 | 46 | 308 |
| TOTAL | 29 | 30.86 | 25 | 2 | 25 | 24.86 | 16 | 7 | 403 | 27.10 | 60 | 315 |

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CABRILLO COLLEGE
WATSONVILLE CENTER STUDY
NOVEMBER 1995
DATA FOR FEMALE POPULATION

| LOCATION | COUNT | % | AVE AGE | HISP | % | WHITE | % | PRIMARY LANGUAGE NON ENGL | % | ENGL | % | HIGH SCHOOL GRAD | AVE CABR UNITS | SOUTH DIST | NORTH DIST | EDUCATIONAL GOAL A | B | C | D | E | F | G | H | I | J | K | L | M | X |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TERM=927 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WATS ONLY | 123 | 67.96 | 34.41 | 84 | 46.41 | 35 | 53.59 | 58 | 47.15 | 65 | 52.85 | 89 | 5.00 | 104 | 13 | 10 | 2 | 3 | 3 | 2 | 9 | 21 | 19 | 2 | 10 | 19 | 2 | 21 | 0 |
| BOTH | 77 | 64.71 | 27.16 | 39 | 32.77 | 34 | 67.23 | 19 | 24.68 | 58 | 75.32 | 70 | 7.57 | 58 | 18 | 21 | 4 | 7 | 1 | 0 | 7 | 7 | 0 | 6 | 2 | 4 | 1 | 17 | 0 |
| CABR ONLY | 1701 | 52.81 | 30.37 | 208 | 6.46 | 1343 | 93.54 | 73 | 4.29 | 1628 | 95.71 | 1506 | 5.74 | 217 | 1370 | 369 | 162 | 61 | 16 | 22 | 160 | 140 | 114 | 44 | 193 | 26 | 18 | 376 | 0 |
| TOTAL | 1901 | 53.99 | 30.50 | 331 | 9.40 | 1412 | 90.60 | 150 | 7.89 | 1751 | 92.11 | 1665 | 5.76 | 379 | 1401 | 400 | 168 | 71 | 20 | 24 | 176 | 168 | 133 | 52 | 205 | 49 | 21 | 414 | 0 |
| TERM=933 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WATS ONLY | 37 | 61.67 | 30.72 | 30 | 50.00 | 5 | 50.00 | 17 | 45.95 | 20 | 54.05 | 26 | 8.66 | 34 | 3 | 3 | 0 | 1 | 3 | 1 | 2 | 10 | 3 | 0 | 1 | 10 | 0 | 3 | 0 |
| BOTH | 47 | 53.41 | 25.07 | 25 | 28.41 | 17 | 71.59 | 12 | 25.53 | 35 | 74.47 | 44 | 9.71 | 35 | 10 | 16 | 4 | 2 | 0 | 0 | 3 | 1 | 0 | 2 | 1 | 4 | 0 | 14 | 0 |
| CABR ONLY | 1002 | 53.87 | 28.29 | 134 | 7.20 | 780 | 92.80 | 70 | 6.99 | 932 | 93.01 | 895 | 7.84 | 146 | 799 | 281 | 108 | 41 | 10 | 14 | 90 | 67 | 32 | 24 | 77 | 15 | 9 | 234 | 0 |
| TOTAL | 1086 | 54.08 | 28.23 | 189 | 9.41 | 802 | 90.59 | 99 | 9.12 | 987 | 90.88 | 965 | 7.95 | 215 | 812 | 300 | 112 | 44 | 13 | 15 | 95 | 78 | 35 | 26 | 79 | 29 | 9 | 251 | 0 |
| TERM=937 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WATS ONLY | 21 | 70.00 | 33.94 | 18 | 60.00 | 3 | 40.00 | 13 | 61.90 | 8 | 38.10 | 15 | 5.64 | 18 | 1 | 1 | 0 | 2 | 1 | 0 | 0 | 4 | 3 | 1 | 0 | 6 | 0 | 3 | 0 |
| BOTH | 33 | 62.26 | 26.00 | 25 | 47.17 | 7 | 52.83 | 12 | 36.36 | 21 | 63.64 | 27 | 8.05 | 28 | 5 | 9 | 1 | 3 | 1 | 1 | 4 | 2 | 0 | 1 | 1 | 3 | 0 | 7 | 0 |
| CABR ONLY | 693 | 54.96 | 28.09 | 103 | 8.17 | 532 | 91.83 | 46 | 6.64 | 647 | 93.36 | 622 | 8.15 | 113 | 544 | 206 | 67 | 31 | 8 | 7 | 68 | 49 | 19 | 20 | 41 | 9 | 9 | 159 | 0 |
| TOTAL | 747 | 55.58 | 28.16 | 146 | 10.86 | 542 | 89.14 | 71 | 9.50 | 676 | 90.50 | 664 | 8.07 | 159 | 550 | 216 | 68 | 36 | 10 | 8 | 72 | 55 | 22 | 22 | 42 | 18 | 9 | 169 | 0 |
| TERM=943 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WATS ONLY | 15 | 53.57 | 28.81 | 12 | 42.86 | 3 | 57.14 | 10 | 66.67 | 5 | 33.33 | 13 | 7.70 | 14 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 2 | 1 | 2 | 1 | 4 | 0 | 1 | 0 |
| BOTH | 45 | 76.27 | 25.20 | 31 | 52.54 | 13 | 47.46 | 14 | 31.11 | 31 | 68.89 | 36 | 7.37 | 33 | 12 | 15 | 0 | 2 | 0 | 0 | 5 | 3 | 1 | 2 | 0 | 5 | 3 | 9 | 0 |
| CABR ONLY | 555 | 52.06 | 27.02 | 76 | 7.13 | 434 | 92.87 | 38 | 6.85 | 517 | 93.15 | 500 | 8.34 | 90 | 434 | 166 | 56 | 33 | 10 | 5 | 62 | 31 | 12 | 15 | 27 | 6 | 6 | 126 | 0 |
| TOTAL | 615 | 53.34 | 26.93 | 119 | 10.32 | 450 | 89.68 | 62 | 10.08 | 553 | 89.92 | 549 | 8.26 | 137 | 447 | 182 | 58 | 36 | 10 | 5 | 67 | 36 | 14 | 19 | 28 | 15 | 9 | 136 | 0 |

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CABRILLO COLLEGE
WATSONVILLE CENTER STUDY
NOVEMBER 1995
DATA FOR FEMALE POPULATION

| LOCATION | COUNT | % | AVE AGE | HISP | % | WHITE | % | PRIMARY LANGUAGE NON ENGL | % | ENGL | % | HIGH SCHOOL GRAD | AVE CABR UNITS | SOUTH DIST | NORTH DIST | EDUCATIONAL GOAL A | B | C | D | E | F | G | H | I | J | K | L | M | X |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TERM=947 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WATS ONLY | 17 | 73.91 | 30.81 | 15 | 65.22 | 2 | 34.78 | 13 | 76.47 | 4 | 23.53 | 13 | 5.32 | 14 | 3 | 3 | 0 | 1 | 1 | 0 | 1 | 2 | 1 | 0 | 0 | 5 | 0 | 3 | 0 |
| BOTH | 33 | 66.00 | 24.00 | 25 | 50.00 | 7 | 50.00 | 10 | 30.30 | 23 | 69.70 | 28 | 8.08 | 27 | 6 | 9 | 1 | 2 | 1 | 1 | 5 | 1 | 0 | 0 | 0 | 2 | 0 | 11 | 0 |
| CABR ONLY | 459 | 56.11 | 27.18 | 64 | 7.82 | 356 | 92.18 | 30 | 6.54 | 429 | 93.46 | 398 | 7.79 | 80 | 355 | 136 | 44 | 21 | 6 | 3 | 42 | 24 | 13 | 12 | 33 | 7 | 8 | 110 | 0 |
| TOTAL | 509 | 57.13 | 27.09 | 104 | 11.67 | 365 | 88.33 | 53 | 10.41 | 456 | 89.59 | 439 | 7.72 | 121 | 364 | 148 | 45 | 24 | 8 | 4 | 48 | 27 | 14 | 12 | 33 | 14 | 8 | 124 | 0 |
| TERM=953 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WATS ONLY | 19 | 73.08 | 32.80 | 16 | 61.54 | 2 | 38.46 | 12 | 63.16 | 7 | 36.84 | 15 | 5.71 | 15 | 2 | 2 | 0 | 2 | 0 | 0 | 2 | 0 | 3 | 0 | 0 | 5 | 0 | 5 | 0 |
| BOTH | 33 | 63.46 | 23.38 | 25 | 48.08 | 8 | 51.92 | 12 | 36.36 | 21 | 63.64 | 24 | 6.80 | 26 | 7 | 11 | 1 | 0 | 1 | 0 | 4 | 0 | 1 | 2 | 0 | 3 | 2 | 8 | 0 |
| CABR ONLY | 405 | 55.71 | 27.27 | 60 | 8.25 | 314 | 91.75 | 27 | 6.67 | 378 | 93.33 | 355 | 7.86 | 68 | 318 | 111 | 43 | 18 | 6 | 4 | 37 | 22 | 7 | 12 | 29 | 6 | 7 | 103 | 0 |
| TOTAL | 457 | 56.77 | 27.22 | 101 | 12.55 | 324 | 87.45 | 51 | 11.16 | 406 | 88.84 | 394 | 7.70 | 109 | 327 | 124 | 44 | 20 | 7 | 4 | 43 | 22 | 11 | 14 | 29 | 14 | 9 | 116 | 0 |





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CABRILLO COLLEGE
WATSONVILLE CENTER STUDY
NOVEMBER 1995
DATA FOR MALE POPULATION

| LOCATION | COUNT | % | AVE AGE | HISP | % | WHITE | % | PRIMARY LANGUAGE NON ENGL | % | ENGL | % | HIGH SCHOOL GRAD | AVE CABR UNITS | SOUTH DIST | NORTH DIST | EDUCATIONAL GOAL A | B | C | D | E | F | G | H | I | J | K | L | M | X |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TERM=927 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WATS ONLY | 58 | 32.04 | 32.32 | 44 | 24.31 | 12 | 75.69 | 30 | 51.72 | 28 | 48.28 | 46 | 4.45 | 51 | 5 | 6 | 0 | 2 | 0 | 0 | 3 | 5 | 6 | 0 | 5 | 19 | 0 | 12 | 0 |
| BOTH | 42 | 35.29 | 28.73 | 21 | 17.65 | 19 | 82.35 | 9 | 21.43 | 33 | 78.57 | 36 | 7.45 | 29 | 10 | 11 | 2 | 3 | 0 | 0 | 5 | 3 | 2 | 0 | 2 | 3 | 1 | 10 | 0 |
| CABR ONLY | 1520 | 47.19 | 29.34 | 223 | 6.92 | 1183 | 93.08 | 69 | 4.54 | 1451 | 95.46 | 1325 | 5.41 | 173 | 1185 | 375 | 173 | 48 | 11 | 22 | 139 | 118 | 104 | 10 | 133 | 22 | 14 | 351 | 0 |
| TOTAL | 1620 | 46.01 | 29.43 | 288 | 8.18 | 1214 | 91.82 | 108 | 6.67 | 1512 | 93.33 | 1407 | 5.43 | 253 | 1200 | 392 | 175 | 53 | 11 | 22 | 147 | 126 | 112 | 10 | 140 | 44 | 15 | 373 | 0 |
| TERM=933 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WATS ONLY | 23 | 38.33 | 29.37 | 21 | 35.00 | 2 | 65.00 | 15 | 65.22 | 8 | 34.78 | 18 | 7.24 | 22 | 0 | 4 | 1 | 2 | 0 | 0 | 1 | 1 | 2 | 0 | 1 | 8 | 1 | 2 | 0 |
| BOTH | 41 | 46.59 | 28.40 | 20 | 22.73 | 18 | 77.27 | 12 | 29.27 | 29 | 70.73 | 35 | 8.89 | 30 | 10 | 14 | 4 | 2 | 0 | 0 | 0 | 5 | 1 | 0 | 1 | 6 | 0 | 8 | 0 |
| CABR ONLY | 858 | 46.13 | 27.75 | 135 | 7.26 | 658 | 92.74 | 48 | 5.59 | 810 | 94.41 | 762 | 7.35 | 98 | 660 | 263 | 112 | 32 | 8 | 7 | 79 | 45 | 23 | 4 | 49 | 14 | 4 | 218 | 0 |
| TOTAL | 922 | 45.92 | 27.82 | 176 | 8.76 | 678 | 91.24 | 75 | 8.13 | 847 | 91.87 | 815 | 7.41 | 150 | 670 | 281 | 117 | 36 | 8 | 7 | 80 | 51 | 26 | 4 | 51 | 28 | 5 | 228 | 0 |
| TERM=937 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WATS ONLY | 9 | 30.00 | 30.49 | 9 | 30.00 | 0 | 70.00 | 8 | 88.89 | 1 | 11.11 | 8 | 4.67 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 6 | 0 | 0 | 0 |
| BOTH | 20 | 37.74 | 29.43 | 14 | 26.42 | 6 | 73.58 | 8 | 40.00 | 12 | 60.00 | 20 | 8.90 | 16 | 3 | 5 | 1 | 2 | 0 | 1 | 1 | 2 | 0 | 0 | 2 | 3 | 0 | 3 | 0 |
| CABR ONLY | 568 | 45.04 | 27.29 | 92 | 7.30 | 431 | 92.70 | 39 | 6.87 | 529 | 93.13 | 503 | 8.03 | 75 | 433 | 181 | 68 | 24 | 5 | 6 | 51 | 34 | 13 | 3 | 24 | 11 | 4 | 144 | 0 |
| TOTAL | 597 | 44.42 | 27.41 | 115 | 8.56 | 437 | 91.44 | 55 | 9.21 | 542 | 90.79 | 531 | 8.01 | 100 | 436 | 186 | 69 | 26 | 5 | 7 | 52 | 37 | 15 | 3 | 26 | 20 | 4 | 147 | 0 |
| TERM=943 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WATS ONLY | 13 | 46.43 | 30.25 | 13 | 46.43 | 0 | 53.57 | 9 | 69.23 | 4 | 30.77 | 9 | 5.31 | 11 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 3 | 0 | 0 | 7 | 0 | 0 | 0 |
| BOTH | 14 | 23.73 | 27.55 | 10 | 16.95 | 2 | 83.05 | 7 | 50.00 | 7 | 50.00 | 13 | 10.79 | 9 | 5 | 4 | 1 | 1 | 0 | 1 | 2 | 2 | 0 | 0 | 0 | 1 | 0 | 2 | 0 |
| CABR ONLY | 511 | 47.94 | 26.45 | 93 | 8.72 | 378 | 91.28 | 34 | 6.65 | 477 | 93.35 | 455 | 7.80 | 79 | 374 | 173 | 55 | 18 | 4 | 7 | 44 | 29 | 12 | 3 | 25 | 9 | 3 | 129 | 0 |
| TOTAL | 538 | 46.66 | 26.57 | 116 | 10.06 | 380 | 89.94 | 50 | 9.29 | 488 | 90.71 | 477 | 7.82 | 99 | 380 | 178 | 56 | 19 | 4 | 8 | 47 | 32 | 15 | 3 | 25 | 17 | 3 | 131 | 0 |

Prepared courtesy of Computing Resources

CABRILLO COLLEGE
WATSONVILLE CENTER STUDY
NOVEMBER 1995
DATA FOR MALE POPULATION

| LOCATION | COUNT | % | AVE AGE | HISP | % | WHITE | % | PRIMARY LANGUAGE NON ENGL | % | ENGL | % | HIGH SCHOOL GRAD | AVE CABR UNITS | SOUTH DIST | NORTH DIST | EDUCATIONAL GOAL A | B | C | D | E | F | G | H | I | J | K | L | M | X |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TERM=947 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WATS ONLY | 6 | 26.09 | 32.50 | 6 | 26.09 | 0 | 73.91 | 4 | 66.67 | 2 | 33.33 | 5 | 8.50 | 6 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 1 | 0 |
| BOTH | 17 | 34.00 | 25.72 | 14 | 28.00 | 1 | 72.00 | 9 | 52.94 | 8 | 47.06 | 17 | 11.18 | 14 | 3 | 8 | 1 | 2 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 2 | 0 | 0 | 0 |
| CABR ONLY | 359 | 43.89 | 26.89 | 63 | 7.70 | 260 | 92.30 | 26 | 7.24 | 333 | 92.76 | 314 | 7.44 | 52 | 276 | 120 | 41 | 11 | 2 | 5 | 36 | 19 | 8 | 3 | 14 | 10 | 3 | 87 | 0 |
| TOTAL | 382 | 42.87 | 26.92 | 83 | 9.32 | 261 | 90.68 | 39 | 10.21 | 343 | 89.79 | 336 | 7.62 | 72 | 279 | 129 | 42 | 13 | 2 | 6 | 37 | 20 | 9 | 3 | 15 | 15 | 3 | 88 | 0 |
| TERM=953 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WATS ONLY | 7 | 26.92 | 30.46 | 6 | 23.08 | 1 | 76.92 | 4 | 57.14 | 3 | 42.86 | 5 | 4.14 | 6 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 0 |
| BOTH | 19 | 36.54 | 27.30 | 15 | 28.85 | 2 | 71.15 | 12 | 63.16 | 7 | 36.84 | 17 | 8.82 | 15 | 4 | 6 | 1 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 3 | 1 | 4 | 0 |
| CABR ONLY | 322 | 44.29 | 26.24 | 61 | 8.39 | 233 | 91.61 | 26 | 8.07 | 296 | 91.93 | 284 | 7.10 | 52 | 250 | 112 | 28 | 9 | 1 | 5 | 32 | 20 | 7 | 2 | 15 | 11 | 3 | 77 | 0 |
| TOTAL | 348 | 43.23 | 26.39 | 82 | 10.19 | 236 | 89.81 | 42 | 12.07 | 306 | 87.93 | 306 | 7.13 | 73 | 254 | 119 | 30 | 11 | 1 | 5 | 33 | 21 | 9 | 2 | 15 | 17 | 4 | 81 | 0 |





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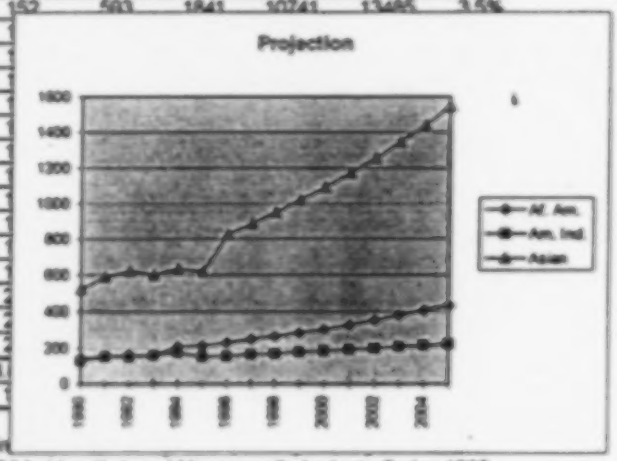
APPENDIX

# Cabrillo College

## Enrollment Projections for Cabrillo College and the Watsonville Center (1995-2005)

| | Af. Am. | Am. Ind. | Asian | Hispanic | White | total | % change |
|---|---|---|---|---|---|---|---|
| 1990 | 145 | 126 | 526 | 1539 | 10691 | 13027 | -3.9% |
| 1991 | 158 | 152 | 593 | 1841 | 10741 | 13485 | 3.5% |
| 1992 | 163 | | | | | | |
| 1993 | 161 | | | | | | |
| 1994 | 212 | | | | | | |
| 1995 | 215 | | | | | | |
| 1996 | 231 | | | | | | |
| 1997 | 248 | | | | | | |
| 1998 | 266 | | | | | | |
| 1999 | 285 | | | | | | |
| 2000 | 306 | | | | | | |
| 2001 | 328 | | | | | | |
| 2002 | 352 | | | | | | |
| 2003 | 378 | | | | | | |
| 2004 | 405 | | | | | | |
| 2005 | 435 | | | | | | |
| Avg.% | 7.3% | 3 | | | | | |
| Avg. N | 176 | | | | | | |




*Whites and Asians enrolli
projecting the number of BA holders that would have enrolled prior to Spring 1996, using the BA holders in Fall 1992 as the base year (n=1,817).

Office of Institutional Research
January, 1996

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# Enrollment Projections for Cabrillo College and the Watsonville Center (1995-2005)

Office of Institutional Research
January, 1996

## Introduction

The Cabrillo Educational Master Planning Committee has made tremendous progress in designing and detailing plans associated with various departments and offices. In completing this monumental task, the Committee recognized the need to conduct enrollment projections for the college. Meanwhile, the college has also undertaken the task of conducting a Needs Analysis for the Watsonville Center/Area. The Study Task Force also concluded that an enrollment projection was needed for the Watsonville Center. In an effort to meet the needs of these two special planning committees, the Office of Institutional Research (OIR) completed the following enrollment projections for the college.

Models for projections vary. The model used by the Department of Finance mostly considered mostly the changes of demographics in adult population and the total population. The Chancellor's Office included in its projection factors such as regional economic performance, student fees, and a different calculation method for adult population in any given county. Specifically, its formula reads:

$$E = a + b(P(>17)) + c(B) + d(PR) + e(CA13) + u$$

where,

E = total fall student count enrollment
P = adult population cohort
B = current expense of education (CEE) in real $ (adjusted for S&LP index)
PR = annual real $ cost to student for attending (including fees, books and supplies, transportation and childcare).
CA13 = Proposition 13, a "dummy" variable
a...e parameter coefficients and u: residual term

The Office of Institutional Research examined different projections from three sources: Cabrillo Facilities Master Plan by Mike Rao (M. Rao Model); the Projection from the Department of Finance (DOF model); and the projection from the Chancellor's Office (CO's model). (See Figure 2). Clearly, M. Rao's projection has unrealistically "inflated" the enrollment and the effect becomes more obvious in the years to come. DOF's projection seems to be more realistic in reference to the actual enrollment figures for Cabrillo. However, the CO's projection has the advantage of adjusting its projection constantly every year. Therefore, the CO's projection model seems to be a more reliable barometer.

Methodology--actual models used

The Office of Institutional Research had two tasks to fulfill: projection for the college enrollment by Ethnicity and projection for the Watsonville Center/Area Enrollment. This prediction will be our local and home-grown product and will generate a number of ramifications. All models discussed above do not include projections for ethnicity and none of the colleges contacted have conducted individual enrollment projections. What would be a reasonable prediction for the future student body in the years to come became an interesting research topic.

Enrollment Projection for Cabrillo College by Ethnicity: Since the Chancellor's Office has already given a general projection for Cabrillo, the task then became whether or not a local projection with detailed regroupings conforms to that of the Chancellor's Office. The Office of Institutional Research conceptualized the model to use past enrollment figures while factoring in major shift factors such as the effect of Differential Fee in Spring 1993. In Table 2 or Figure 3, projection for Fall semester student count enrollment used average percentage change in the past six Fall semesters as the co-efficient while factoring in the assumption of the number of students who would have enrolled at Cabrillo College if the Differential Fee was not implemented. The enrollment data provided by the Admissions and Records Office showed that approximately 10% of the enrollment was affected by the differential fee with White and Asian students probably being affected the most. Using the number of Bachelor degree holders in Fall 1992 --the semester before the Differential Fee kicked in-- the Office of Institutional Research reverse projected how many Bachelor degree holders Cabrillo would have had. The assumption is that Cabrillo would have had at least as many as in the Fall of 1992. Any difference herein went back into the past enrollment figures for a more reasonable projection for the future.

Enrollment Projection for the Watsonville Center/Area: The Watsonville Center is located in South Santa Cruz County. The Office of Institutional Research consulted with several members in the Research and Planning Group (RP Group) and Chuck McIntyre, Director of Research at the Chancellor's Office, and came to the conclusion that the best model for student count enrollment projection is the "Policy Model." A policy model puts what is to be recruited before what is to be expected, since the model is driven by what the institution would like to achieve, rather than what can be predicted to achieve. The reason behind adopting this model is that it is highly insecure to use localized econo-metric factors such as cost of living and employment rate to predict a small group of students' behavior. The underlining assumption is that there is a low population participation rate in areas such as Watsonville, where, traditionally, students have not had high access. Another assumption is that the population participation rate should be at least the same as that of the main campus.

After examining the population participation rates for both the main campus and the Watsonville Center, the projection for the Watsonville Center chose to use population participation rate as the model for this projection. Population participation rate is defined

as the ratio of college going students and the total number of the service area's adult population (ages 18 and above).

## Enrollment Projection for Cabrillo College

Figure 2 illustrates the three different models of enrollment projection: 1) M. Rao's; 2) DOF's; and 3) Chancellor's Office's. The Chancellor's Office also provided projection for the Weekly Student Contact Hours (WSCH). This information may be used for predicting FTES. For this study, WSCH is not translated into FTES. From both Figure 2 and Table 1, it is clear that Chancellor's Office's projection appears to be most reasonable and reliable at this point in time. According to its projection, the change between 1995 and 2005 is a total of 3,146 students, or an increase of 26% over the year 1995. In other words, there will be 3,146 more students at Cabrillo 10 years from now.

Figure 3 only demonstrates the change of ethnic student population at Cabrillo. Table 2 includes the projection for White students. It is projected that all minority students will experience an increase in enrollment in the next 10 years, with Hispanic students having the largest increase in number (n = 2,328), and African American students having the largest change rate (7.3%). Hispanic students will experience a 100% increase which will double their current enrollment. The rates of change for both Hispanic and Asian students are the same (7.2%), which is almost as high as that of African Americans; American Indian students have the lowest increase rate (3.8%). White students will experience continuous decrease into the next century at a rate of -2.1% per year.

The decrease in White students and the increase in all ethnic minority students will dictate the shape and form of tomorrow's student body. **By the year 2005, only half of the student population will be White, and one in every three will be a Hispanic student. The overall growth rate for the college will be around 1.5% per year to reach a total of 14,411 students by the year 2005.** This figure is somewhat lower than the projection by the Chancellor's Office, which should not cause great concern.

The sunset of the Differential Fee will cause an enrollment surge of around 1,000 students in the coming year compared to the number in fall 1995. After that, enrollment will resume its normal rate of 1.5% increase per year.

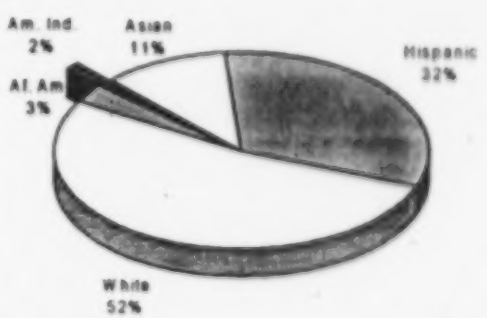


*Figure 1. Ethnicity distribution among students in year 2005.*



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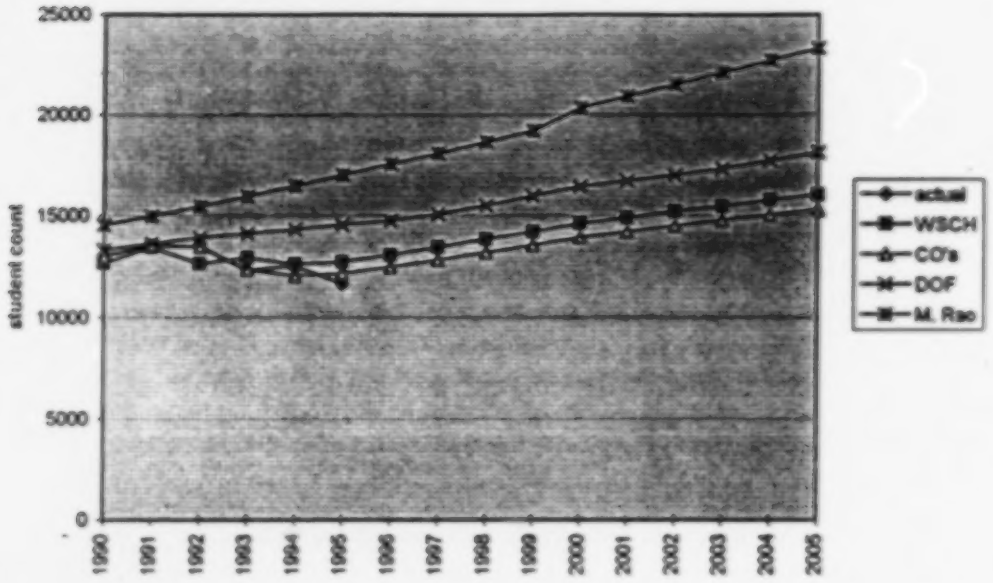
Figure 2. Enrollment Projection Models for Cabrillo College (1990-2005)




Note: In the above figure, WSCH hours projected by the Chancellor's Office have been rescaled to 1/10 of their original values.

Table 1. Enrollment Projection Models for Cabrillo College (1990-2005)

| | actual | WSCH | CO's | DOF | M. Rao |
|---|---|---|---|---|---|
| 1990 | 13027 | 12685 | 13027 | 13340 | 14562 |
| 1991 | 13500 | 13442 | 13558 | 13640 | 14997 |
| 1992 | 13529 | 12639 | 13480 | 13940 | 15462 |
| 1993 | 12341 | 12940 | 12341 | 14140 | 15959 |
| 1994 | 12516 | 12617 | 12033 | 14330 | 16471 |
| 1995 | 11632 | 12741 | 12151 | 14550 | 16997 |
| 1996 | | 13066 | 12461 | 14750 | 17555 |
| 1997 | | 13432 | 12810 | 15060 | 18073 |
| 1998 | | 13840 | 13171 | 15490 | 18637 |
| 1999 | | 14221 | 13562 | 15970 | 19220 |
| 2000 | | 14610 | 13933 | 16450 | 20354 |
| 2001 | | 14911 | 14220 | 16723 | 20932 |
| 2002 | | 15211 | 14506 | 17000 | 21516 |
| 2003 | | 15465 | 14778 | 17309 | 22107 |
| 2004 | | 15768 | 15038 | 17717 | 22704 |
| 2005 | | 16039 | 15297 | 18127 | 23307 |

**Figure 3. Cabrillo College Enrollment Projection for Minority Students (Fall semesters) 1990-2005--draft**

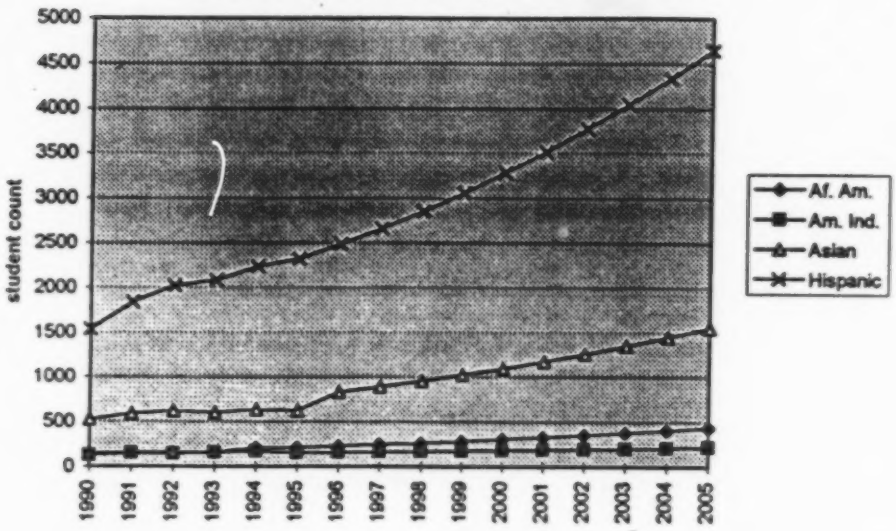



Table 2. Cabrillo College Enrollment Projection by Ethnicity (1990-2005).

| | Af. Am | Am. Ind. | Asian | Hispanic | White | total | % change |
|---|---|---|---|---|---|---|---|
| 1990 | 145 | 126 | 526 | 1539 | 10691 | 13027 | -3.9% |
| 1991 | 158 | 152 | 593 | 1841 | 10741 | 13485 | 3.5% |
| 1992 | 163 | 151 | 624 | 2022 | 10437 | 13397 | -0.7% |
| 1993 | 161 | 161 | 603 | 2083 | 9196 | 12204 | -8.9% |
| 1994 | 212 | 175 | 636 | 2236 | 9105 | 12364 | 1.3% |
| 1995 | 215 | 153 | 622 | 2318 | 8127 | 11435 | -7.5% |
| 1996 | 231 | 159 | 828 | 2485 | 9153 | 12855 | 12.4% |
| 1997 | 248 | 165 | 887 | 2664 | 8960 | 12924 | 0.5% |
| 1998 | 266 | 171 | 951 | 2856 | 8772 | 13016 | 0.7% |
| 1999 | 285 | 178 | 1020 | 3061 | 8588 | 13131 | 0.9% |
| 2000 | 306 | 184 | 1093 | 3282 | 8408 | 13272 | 1.1% |
| 2001 | 328 | 191 | 1172 | 3518 | 8231 | 13440 | 1.3% |
| 2002 | 352 | 199 | 1256 | 3771 | 8058 | 13636 | 1.5% |
| 2003 | 378 | 206 | 1346 | 4043 | 7889 | 13862 | 1.7% |
| 2004 | 405 | 214 | 1443 | 4334 | 7723 | 14120 | 1.9% |
| 2005 | 435 | 222 | 1547 | 4646 | 7561 | 14411 | 2.1% |
| Avg.% | 7.3% | 3.8% | 7.2% | 7.2% | -2.1% | | 1.5% |
| Avg. N | 176 | 153 | 601 | 2007 | 9716 | 12652 | |

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Enrollment Projection Scenarios for the Watsonville Center/Area

In order to calculate the overall population participation rate for Cabrillo College in general, the Office of Institutional Research used the total adult population projected by DOF (n = 118,354) in Santa Cruz County which constitutes 66% of the total population in the County (n = 179,005). The overall population participation rate for the entire college is 9.77%, meaning that there are about 98 students in college for every 1,000 people who are 18 or older in this county. This figure is higher than the State average of 6.58%--an all time low since 1969. The Chancellor's Office indicated that the overall population participation rate for the state should be somewhere between 7% or 8%.

The adult population figure for the Greater Watsonville Area (n = 29,627), including Freedom and Pajaro (census tracks 1102, 1103, 1104, 1105, 1106, 1107, 1223 and 1224; or zip codes 95076, 95019, 95039, 95004, 95020, 93907, 95012, and 95045) was found to be 79% of the total population in that area (n = 37,439) (see Table 3 or Figure 6). Clearly, there is a large population of college age adults residing in the Greater Watsonville Area. The population participation rate for the Watsonville Center is only 3.41%, or about 34 college going students in 1,000 adult people. This figure does not include the number of students who enrolled exclusively at the main campus in Aptos which ran as high as 1,152 in the fall of 1994. There was a total of 2,271 students from south county enrolled at Cabrillo in the fall of 1994, according to the "Enrollment Distribution Study by Zip Codes" conducted by the Office of Institutional Research in 1995.

After the population participation rate was determined, the Office of Institutional Research ran several scenarios to help describe the case in point: what are we expecting with current population participation rate (3.41%) or a moderate growth to 4.41% and what can be expected should we decide to increase the rate to that of the college in general (9.77%), or somewhere in between.

Figure 4 and Table 3 help demonstrate the projections of student count average enrollment per calendar year from 1995 to 2005. **With current population participation rate of 3.41%, the enrollment will increase by 49%, or a total of 546 students. One percentage point increase to 4.41% means an increase of 881 students or 80% over 1995. If a decision is made to achieve an equal population participation rate with that of the college in general, the enrollment should reach a total of 4,736 students by the year 2005. This is 3,629 students more than in the Fall of 1995, or an increase of 327%.**

There is every reason to at least maintain the current *population participation rate* for the Watsonville Center. In this case, it means more resources need to be committed to accommodate the growth. Even more resources need to be allocated if the population participation rate is to increase and mirror the Cabrillo College's population participation rate. These are important policy decisions to consider.

**Figure 4. Watsonville Area Student Count Enrollment Projection Scenarios**

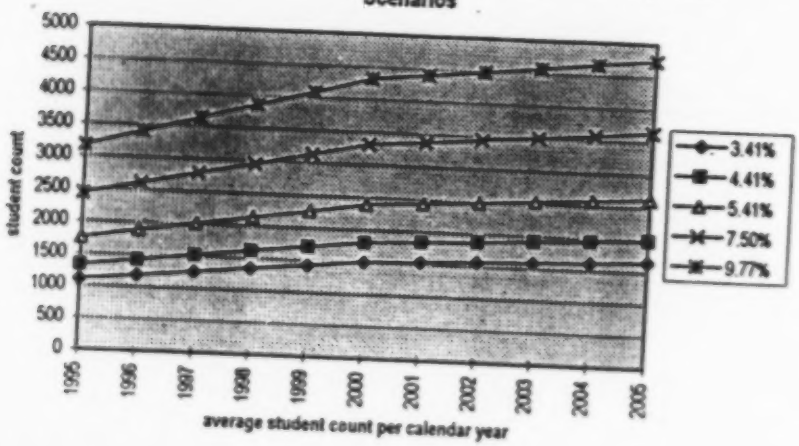


Table 3. Watsonville Population Projection and Student Count Enrollment Scenarios

| | WATPop | WAAPop | Scenario1 WPPR 3.41% | Scenario2 4.41% | Scenario3 5.41% | Scenario4 7.50% | Scenario5 CCPPR 9.77% |
|---|---|---|---|---|---|---|---|
| 1990 | 37439 | 29577 | | | | | |
| 1991 | 38168 | 30153 | | | | | |
| 1992 | 38897 | 30729 | | | | | |
| 1993 | 39626 | 31305 | | | | | |
| 1994 | 40355 | 31880 | | | | | |
| 1995 | 41088 | 32460 | 1107 | 1331 | 1756 | 2434 | 3171 |
| 1996 | 44041 | 34792 | 1186 | 1426 | 1882 | 2609 | 3399 |
| 1997 | 46994 | 37125 | 1266 | 1522 | 2008 | 2784 | 3627 |
| 1998 | 49947 | 39458 | 1346 | 1618 | 2135 | 2956 | 3855 |
| 1999 | 52900 | 41791 | 1425 | 1713 | 2261 | 3134 | 4083 |
| 2000 | 55851 | 44122 | 1505 | 1809 | 2387 | 3309 | 4311 |
| 2001 | 56954 | 44994 | 1534 | 1845 | 2434 | 3375 | 4396 |
| 2002 | 58057 | 45865 | 1564 | 1880 | 2481 | 3440 | 4481 |
| 2003 | 59160 | 46736 | 1594 | 1916 | 2528 | 3505 | 4566 |
| 2004 | 60263 | 47608 | 1623 | 1952 | 2576 | 3571 | 4651 |
| 2005 | 61366 | 48479 | 1653 | 1988 | 2623 | 3636 | 4736 |

Note: 1) adult population is estimated from one year distribution of adults (ages 18+) in the total population.
2) Population Participation Rate = college student count/adult population.
3) WPPR: Watsonville Population Participation Rate.
4) SCCPPR: Santa Cruz County Population Participation Rate.
5) population growth rate is based on the projection rate established by Ambag for the City of Watsonville.

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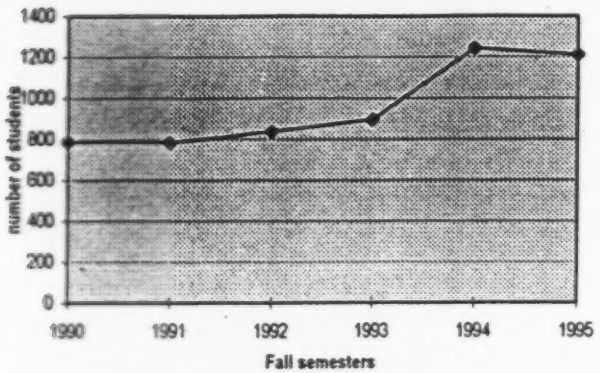
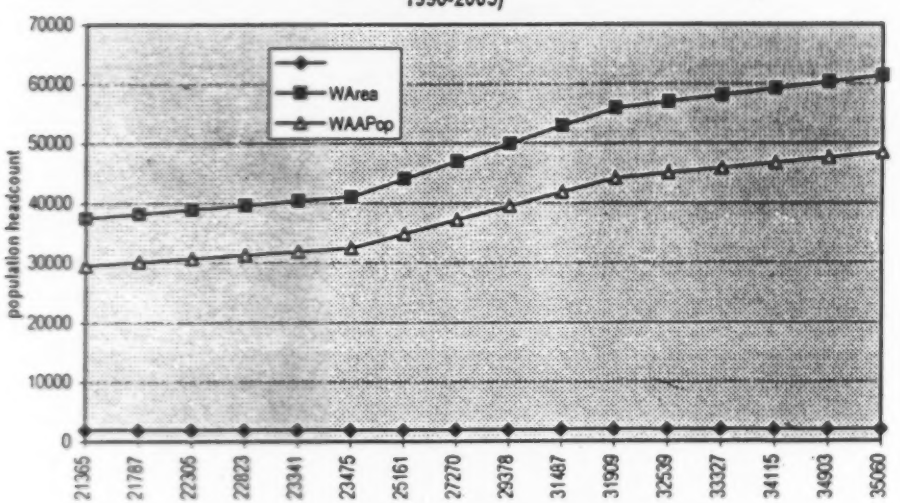
**Figure 5. Watsonville Center/Area Student Count (Falls, 1990-1995)**




Sources: Admissions and Records Office, Computing Resources, the Watsonville Center.

**Figure 6. AMBAG Projection for City of Watsonville Total Population Growth and OIR Extrapolated Adult Population Growth (in real numbers, 1990-2005)**




Note: 1) Figure 6 was generated using data from columns 1, 2, 3 in Table 3.
2) AMBAG, or, ambag = Association of Monterey Bay Area Governments 408/883-3750.

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